QL
690
.S45S45
3 RPD

Scottish Bird News

No 91 Mar. 2009

Greenland White-fronted Geese on the Loch Lomond Nature Reserve

A wintering Greenland White-front's view of Ben Lomond *David Palmar, www.photoscot.co.uk*

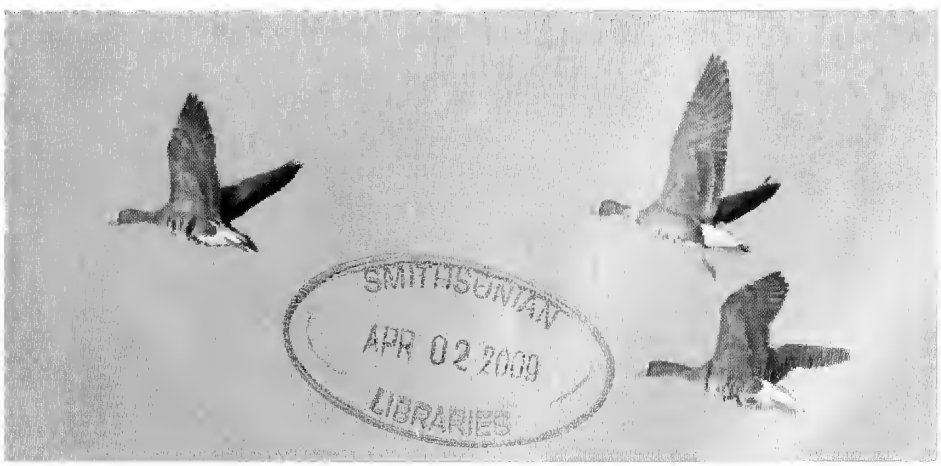
I had often thought of following up the reports on the Clyde SOC Grapevine emails of the wintering flock of Greenland White-fronts (GWF) at Gartocharn, to witness them for myself. It was therefore thanks to Jim and Val Wilson who manage the Clyde SOC Grapevine email list, and also to Ian Fulton, Margaret Stead and Tim Jacobs who record the geese, that I went to Loch Lomond four times in late December 2008 and in January 2009. I acknowledge particularly too the wealth of information subsequently received from Tony Fox in Denmark.

The sun shone on two of those days, so I wasn't going to miss the opportunity to take a few pictures. Imagine my surprise when on looking at the photos on my computer in the evening, there were several pictures of a neck-collared individual with the designation K0C. Photographed in flight in December, and again on the ground in January, the information was passed on to Jim and Val, and through them to Tony Fox. I received (and sent) a flurry of interested emails, so I thought it would be nice if I wrote this article, describing the roles and expressing the views of all the people most involved in this GWF monitoring process.

For some years now, Margaret Stead, along with representatives from SNH, Ian Fulton for the past two years, and other volunteers, has visited the Endrick Reserve on a weekly basis to carry out WeBS counts and/or avian flu surveys. This has provided a good opportunity to spot the first of the White-fronts as they return for the winter.

Her earliest sighting was of six on 16th September 2005. This was unusually early, as they would not normally travel beyond Iceland by this date. On 13th October 2008, six were seen on Ring Point. Three days later, this number had risen to eighteen and increased gradually until by mid-December the flock appeared to be complete. The first arrivals seemed content to remain within the Reserve but once their numbers increased, the majority would head out each day to feed in the fields in and around Gartocharn.

For some years now, there have been two designated international census days for Greenland White-fronted Geese. The first is in "autumn" and takes place in mid-December. The second is in spring and takes place in mid-March. Other nominated census days occur in November, January and February.


SMITHSONIAN
APR 02 2009
LIBRARIES

Collared goose in flight *David Palmar, www.photoscot.co.uk*

White-fronts grazing near Gartocharn *David Palmar, www.photoscot.co.uk*

In addition to this, those who are regularly near Gartocharn monitor the whereabouts of the geese and, when possible, their numbers. Due to concern regarding the poor breeding record of the GWFs, it is also important to monitor the percentage of young birds within the flock. Ian Fulton (SOC Glasgow) is the most assiduous monitor, taking great care to get regular and accurate counts, often backed up with photographs. While there are designated Greenland White-fronted Goose census days, the geese have been known to vanish on that particular day. This makes these independent counts all the more valuable.

Tim Jacobs is the Manager of Loch Lomond Nature Reserve, a real biodiversity hot spot with an impressive list of important habitats and species. Its small wintering population of Greenland White-fronted Geese is undoubtedly one of the highlights. It typically hosts over 200 birds, representing approximately 1% of the UK population. The reserve is important, says Tim, because of the roosting opportunities that it offers around the Endrick Mouth and the lower flood plain wetlands.

SNH operates a sluice system on Wards Pond, which ensures open water during the winter months and of course, this benefits a whole host of other waterfowl as well. Up until 2007, the GWFs have predominantly roosted on Wards Pond but then moved to Ring Point, which may have become more attractive to geese, as SNH removed a strip of scrub from the spine of Ring Point to reduce the potential for crow predation on ground-nesting birds. It appears that this may also have benefited geese by improving their sight lines and generally making the area feel a lot more open.

Although geese do feed on some of the more improved swards of the reserve, SNH do not undertake specific sward management, as there appear to be plenty of suitable swards in the vicinity, and typically, the White-fronts use a number of local fields just to the west. As long as there is adequate grazing near to the reserve, SNH are keen to let the more improved swards of the reserve gradually revert and diversify, rather than fertilising them and potentially impairing the water quality of the loch during times of flooding.

As well as managing and monitoring Greenland White-fronts on the ground, SNH is helping with the conservation of the species internationally by supporting and funding the Greenland White-fronted Goose Study's forthcoming international workshop, which will help the range states to develop the Flyway Management Plan.

Tony Fox, from Denmark, is a major figure in the Greenland White-fronted Goose Study, which maintains the database of resightings of collared Greenland White-fronted Geese and also coordinates the annual census of the population.

He was absolutely "chuffed to bits" to receive this particular collared goose resighting, as this individual is well known to him from several personal encounters in Iceland on passage. K0C is a female, caught as a first winter bird in March 1998, on the North Slob at Wexford in SE Ireland.

Unfortunately, because she was caught late in the winter and because apparently only part of her family was caught, it is very difficult to determine her family relationships. However, it looks like she was the offspring of a male that probably escaped capture and the female K2F, together with a male sibling K4F, although Tony suspects there were more unringed siblings associated (i.e. which like Dad escaped capture). K0C associated with both these birds in the following winter (1998/9), although K4F was not reported after January 1999.

Unusually, K0C wintered at Clachan on the Mull of Kintyre in 1999/2000 (apparently associating with an unringed bird), but was back at Wexford in with K2F in 2000/1, while in 2001/2 they were seen only once together at Wexford Slobs, despite both being there all winter. K0C was seen again twice with K2F in winter 2003/4, so the loose mother/daughter bond continued until that winter, the last season for which we have any record of the K2F.

Tony reports, "she was missing completely in 2 winters, when we have no idea where she was, and this year had been seen (now we know only briefly) on Islay in the Inner Hebrides on 23rd October 2008 before being reported from David's excellent photographs on 29th December 2008 at Endrick Mouth, where K0C has apparently spent the winter. So you see, the part of the jigsaw that David has provided is very interesting for the Study. Our experience has been that Greenland White-fronted Geese show great site fidelity, and after leaving their parents and settling with a new mate, they rarely move wintering site."

Although there are many examples of birds briefly staging (e.g. in autumn when birds sometime stop on Kintyre en route to Wexford), winter movements (like K0C moving from Islay to Loch Lomond) are not common, although individuals do seem to move more now than they did in the past. Many collared birds also turned away from their normal haunts this autumn, with records from Norway, Denmark, and from eastern Scotland, so perhaps they experienced problems with the weather. The collars are originally quite a strident orange when applied, but they fade rapidly with exposure to sunlight, presumably the UV wavelengths making the greatest impact. This means that after two years or so they are an olive-green grey, which is difficult to spot against the neck coloration - many a time scanning through a flock Tony has found a marked bird by the white leg band, having completely missed the collar, despite devoting considerable attention to every neck!

He concludes by referring interested readers to the web site, which the Study maintains about the British wintering sites where you can see the run of Loch Lomond counts as well as those from elsewhere in recent years: **http://greenlandwhitefront.homestead.com/69lochlomond.html** You can click on the tabs at the top to navigate round the entire site

David Palmar, www.photoscot.co.uk (with thanks to Jim, Val and Ian and for the generous data contributions from Margaret, Tim and Tony).

Scottish Bird News
No 91 Mar. 2009

Edited by
Jimmy Maxwell
Ian Francis

Assisted by
Jean Torrance
Wendy Hicks

Contents

Greenland White-fronted Geese on the Loch Lomond Nature Reserve 1

News & Notices 3

Finding breeding Long-eared Owls 5

Nesting in the North: the NRS in Scotland 6

Stopping wildlife crime - how you can help 10

Rare Breeding Birds - guidelines on their recording 11

Birding in Vermont (Part 2) 12

Bird Atlas 2007–11, the second breeding season 14

BirdSpot - Grey geese in flight 15

Ornithological collections at the National Museums Scotland, Edinburgh 16

Notes & Comment 19

Book Reviews 22

Contributions for the next issue of *SBN* should be submitted not later than 9th May 2009 to:

SBN Editor,
SOC, Waterston House,
Aberlady, East Lothian
EH32 0PY.

Articles can be sent on disc or by e-mail (mail@the-soc.org.uk), although we do still accept typed or handwritten material.

Designed by
Harry Scott, Pica Design, Aboyne

Printed by
Meigle Colour Printers Ltd, Galashiels

NEWS & NOTICES

New SOC Members

We welcome the following new members to the club: **Ayrshire** Ms M Armour, **Central Scotland** Mrs F Peacock, **Clyde** Mr J W Carruthers, Ms J Clark, Mr & Mrs J Lawson, **England, Wales & NI** Mr M Ketcher, Mr S Rutt, Ms S Webster, **Highland** Mr A Ritchie, Mr I Turnbull, **Lothian** Mr & Mrs J Bannister, Mr D Bearhop, Ms A Brown, Mr & Mrs P Brown, Mr J Cochran, Mr T R Duffy, Dr E Gatner, Mr T Goater, Mrs F Govan, Mr & Mrs J Hamilton, Mr & Mrs W J Hurt, Mr & Mrs W Low, Mrs M L K Lyddon, Dr & Mrs C Maingay, Mr I Marrian, Mr D Monteith, Dr & Mrs R Muir, Mr E Pert, Dr B EH Sumner, Ms A Zabala, **Stewartry** Mr A Ferguson, **Tayside** Mr N K Atkinson, Mr R Barbour, Ms J Milne.

SOC 200 Club

The latest prizewinners are – **November: 1st** £30 C.K.Milne **2nd** £20 Prof. P.Vandome **3rd** £10 Prof. P.J.Slater **December: 1st** £30 Mrs.E.Smith **2nd** £20 G.T.Wren **3rd** £10 D.F.Donnelly **January: 1st** £30 Miss J.Howie **2nd** £20 J.M.Wills **3rd** £10 Mrs.H.Merrie.

New members are always welcome. They must be over 18 and SOC members. Please contact – Daphne Peirse-Duncombe, Rosebank, Gattonside, Melrose, Roxburghshire TD6 9NH.

Through 200 Club funds, the SOC has bought another glass cabinet for the foyer to display *The Birds of Scotland* awards and the *RSPB Golden Plover Award* (to George Waterston). Also awaiting delivery, is a 37" LCD screen to be used for education and promotional material.

Obituary note

We were sad to note that the Earl of Wemyss and March died on 12th December 2008, aged 96. One of Scotland's most distinguished conservationists, he had strong connections with SOC, officially opening Regent Terrace in 1959 and cutting the first turf at Waterston House in 2004. An obituary will duly appear in Scottish Birds.

Osprey anniversary

By the early 1900s, breeding Ospreys were hounded to extinction in Scotland by egg and skin collectors. Then in 1954 a pair fledged young in Strathspey but was seen by very few people. When the late George Waterston, RSPB's Scottish Director, heard about a pair building a nest by Loch Garten in 1958, a team was quickly raised but sadly the nest was robbed. The birds then built another eyrie at the other end of the Loch and left.

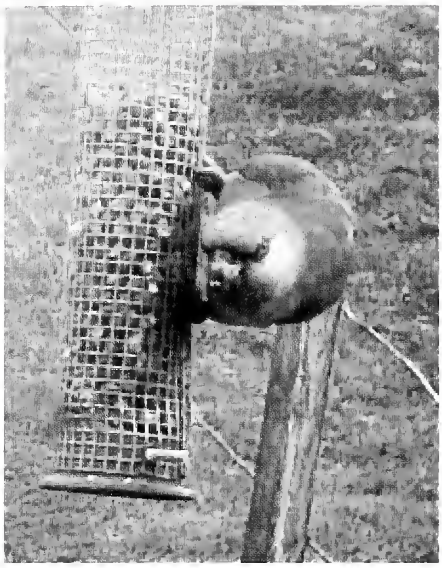
In 1959 a better organised team was ready when the birds returned and, once eggs were laid, began 24 hour watches. After the long five week incubation, the chicks hatched in early June and it was decided to open the tiny hide to the public. They came in their hundreds with 14,000 people viewing these magnificent birds in that first year. Remember, interest in birds by the general public was almost unknown all those years ago – the RSPB only had 6000 members for the whole of the UK then!

Since then nearly two million visitors have enjoyed these wonderful birds by the side of Loch Garten and there have been several spin-offs, but two are special. First, since 1959, Ospreys have expanded widely in Scotland and are now nesting in England and Wales. Second, the RSPB has bought huge tracts of Caledonian forest surrounding the area where the wonderful range of wildlife can flourish for ever.

I was there in 1957 and two months in 1959 – but where did the last 50 years go I ask myself?

Frank Hamilton

Osprey hunting over its territory *Jimmy Maxwell*



Senegal Parrot *G. Zonfrillo*

Recording those Escapes

It is intended that our SOC Website will start a page devoted to escapes which have appeared in Scotland. Our photo shows an escape Senegal Parrot which turned up at a garden feeder in Uddingston – as far as we know it is the first time this species has been recorded wild in Scotland. If an escape has turned up somewhere, the best evidence would obviously be a photo of the bird and then information as follows – the species (if known), a description, the date and time observed, the bird's behaviour and the place and details of the recording area. These photos and notes should be sent direct to Stephen Hunter at stephensoc@btinternet.com (or to him by post, via SOC, Waterston House, Aberlady).

Raffles' Ark Redrawn

Natural History Drawings from the Collection of Sir Thomas Stamford Raffles. A colourful exhibition of natural history drawings – plants, birds and mammals – made for Sir Stamford Raffles, largely in Sumatra, will be on show in Inverleith House, Royal Botanic Garden Edinburgh, from 9 May to 28 June 2009. These are from the Raffles Family Collection, which has recently been purchased by the British Library. In fact it represents something of a homecoming, as from 1939 to 1969 the drawings were kept in Inshriach House near Aviemore, the property of the Drake family, including Jack Drake the alpine nurseryman who was Raffles' great great great nephew. The story of the drawings is a dramatic one. In 1824 Raffles set sail from Sumatra with huge collections including Malay manuscripts, animals specially tamed for the voyage, and around 2500 natural history drawings commissioned from mainly Chinese artists. Just offshore the boat caught fire when a careless sailor used a naked candle to tap some brandy from a cask. The passengers were all saved, but the collections entirely lost and in the ten weeks until the next boat left, the artists were able to make about 120 drawings to replace the lost ones, of which a selection will be shown. The birds, including Raffles' Malkoha, Diard's Trogon, the Fireback Pheasant and Nicobar Pigeon, are spectacular and on some the artist has used silver leaf to convey the iridescence of feathers. A fully illustrated catalogue will be available at the exhibition priced £20, written by myself, after researching the birds at the SOC library at Aberlady.

Henry Noltie

BTO Scotland Training Courses

Location	Date	Topics
Atholl Estates, Perthshire	Wednesday 4th March 2009	Bird recording for landowners and land managers
SNH Newton Stewart, Wigtownshire	Saturday 14th March 2009	Bird identification, Bird Atlas and other surveys
Stirling University	Saturday 28th March 2009	Bird identification and surveys for beginners
Mugdock Country Park, Dunbartonshire	Saturday 18th April 2009 (early morning)	Bird Song
Chatelherault Country Park, Lanarkshire	Sunday 26th April 2009	Bird identification and surveys for beginners
Aberdeenshire	April/ May 2009	Bird Atlas
Caithness	April/ May 2009	Bird identification and bird song
Glencoe Visitor Centre	Saturday 9th May 2009	Bird recording in the uplands (an introduction for hillwalkers, etc)
Angus Glens Ranger Base, Angus	Weekend of 16-17th May 2009	Bird identification, Bird Atlas and other surveys
Harestanes Visitor Centre, Ancrum, Jedburgh, Borders	Sunday 17th May 2009	Bird identification, Bird Atlas and other surveys
Stirling University	6th June 2009	Introduction to the Nest Record Scheme
Great Glen House, Inverness	Sept/ October 2009	Introduction to bird surveys and the Atlas
Chatelherault Country Park, Lanarkshire	Saturday 24th October 2009	Bird identification and an introduction to winter surveys

Please contact Robin.Anderson@bto.org to reserve a place on any course. Please note the Stirling course is fully booked but we are taking names on a waiting list. The courses are free to those who are intending to carry out bird surveys. Lunch is provided.

Robin Anderson, Development and Administration Officer,
BTO Scotland, School of Biological and Environmental Sciences,
Cottrell Building, University of Stirling, Stirling FK9 4LA.
Tel: 01786 466560 Fax: 01786 466561

Finding breeding Long-eared Owls

Long-eared Owl chick *Rab Rae*

Long-eared Owls are widespread breeding birds over much of Scotland. They are however easily overlooked and their presence is often first noticed when the squeaking of chicks is heard in May or June. To get a better picture of the distribution of these birds a comprehensive search of their likely habitats is required. This should initially take the form of identifying where they are likely to occur. In Scotland they avoid heavily wooded areas where Tawny Owls appear to predominate but seem to prefer a patchwork of smaller woods, shelter belts, open pine forest and scattered trees, such as are often found on mosses, especially if these include conifers. Forests at the edges of uncultivated ground are also frequent sites.

A typical nest woodland *Ian Francis*

Once likely areas have been identified a quick walk through looking for the presence of a roost can often show presence of birds. Roosts are easily identified by the presence of pellets often in a tight circle with dropping splashes through the branches above them.

Pellets and signs of Long-eared Owls *Rab Rae*

Long-eared Owl nest with eggs *Rab Rae*

Alternatively, listening at dusk you will often hear the male's deep "boooing" song, though they do not always sing and the songs and calls can be quite quiet and infrequent with sometimes three or four minutes between hoots. Calm conditions are necessary, ideally with no traffic noise, to be sure that the song can be heard. In North East Scotland, this is best done in late March or early April.

Once the pair has been detected, the nest will not be far from either the calling birds or the roosting adults. Males during incubation roost close to the sitting female, often in the next tree. Nests are almost always in old crow nests and very occasionally on the ground (though these are extremely difficult to find). Nests in trees are far easier and the sitting females will often be betrayed by the presence of feathers around the edge of the nest or it might be possible to see their ear tufts sticking up above the rim of the nest from the ground. The most frequent nests used are those built by Magpies, but if these are not present in the area then crow or other similar sized nests are commonly chosen. The nest will not normally be open to the sky but will be further down the tree, below the canopy. Sitting females sit tight and will often sit even when the observer is climbing the tree. There is also a risk that nesting birds can be aggressive so caution is needed!

Long-eared Owl nest in Scots Pine *Rab Rae*

Long-eared Owls generally lay between three and five eggs in April but the laying dates appear to be strongly related to vole abundance and can be earlier or sometimes much later - or they may even not lay at all in years of low prey abundance. Once the chicks have hatched their presence is easily noticed by the squeaky call of the hungry chicks (which sounds like a distant Golden Plover or metal gate hinges). If they are not hungry however they may not make this call.

A young Long-eared Owl chick *Rab Rae*

Once located, sites can be used for many years. I have sites that have been used for some 40 years - not necessarily every year but in years when birds have been breeding they have invariably used these same sites. It is therefore well worth making the effort to go round that moss or to check that shelterbelt this month, looking and listening for those tell-tale signs. Effort like this is needed so that Long-eared Owls are not overlooked in the breeding bird atlas and as part of local recording schemes. Good hunting!

Rab Rae
rab.rae@wellheads.co.uk

Nesting in the North: the NRS in Scotland

Willow Warbler at the nest *Bob Coyle*

Having grown up on the North Norfolk coast, the majority of my bird-related memories, even when very young, revolve around the various rarities that have passed between Titchwell and Cley at one point or another during the last three decades. I was, almost literally, a born twitcher, someone who ticked his first Semipalmated Sandpiper shortly before his first Garden Warbler (and long before I could identify either). The thought of seeing a species eligible for addition to one of my many lists was the driving force that got me out into the field at every available opportunity. That is, until I came to the British Trust for Ornithology (BTO) and realised that, despite a life-long interest in birds, there was one vital part of their life-cycle that I really knew very little about – their nesting behaviour.

I suspect that the majority of birders of my generation, and possibly the one before, find themselves in a similar situation, having been raised at a time when the profile of egg-collecting was high and people were therefore generally discouraged from looking for nests. The decline of nest monitoring as an ornithological pursuit was already apparent in 1952, when Bruce Campbell remarked in his guide '*Finding Nests*' that even knowledgeable field ornithologists of the time would often reveal their ignorance of nesting behaviour 'with a mixture of pride and shame'. These attitudes have resulted in the loss of a great deal of field craft and a dearth of nest finding literature, such that nest recording has become almost an underground branch of natural history.

While I would be the first to tell someone not to approach a nest just to satisfy their own curiosity, collecting information about productivity is a vital part of bird conservation, and the loss of the skills required to do so is having a major impact on our ability to understand population declines. This situation is all the more frustrating as nest recording is actually very accessible. You don't need a lot of expensive equipment, there are nesting birds in every habitat you care to mention and, with the exception of Schedule 1 species (www.naturenet.net/law/sched1.html), no licence is required to approach a nest and look inside. Don't believe those who tell you that nest finding ability is a near-psychic skill that only those who are born under a certain planetary alignment are capable of mastering – as with most birding, all it really requires is a bit of knowledge, a bit of patience and a bit of luck. And, to my mind, there is no sense of birding satisfaction to equal that experienced by a nest finder when finally locating that elusive nest.

Why do we need the Nest Record Scheme?

The NRS is actually one of the BTO's longest-running monitoring schemes, initiated in 1939 at the Edward Grey Institute at Oxford, the brainchild of James Fisher and Sir Julian Huxley, who wanted to collect a definitive dataset on avian reproduction to inform a proposed revision of Witherby's *Handbook*. Like the Ringing Scheme, it is now funded under the BTO/JNCC partnership and, these two surveys, together with the BTO/JNCC/RSPB Breeding Bird Survey (BBS), form the core of BTO's Integrated Population Monitoring Programme. By combining the information collected under the individual components, we are not only able to identify whether a species is increasing or declining (BBS), but also to determine whether observed changes in abundance are driven by breeding success (NRS) and/or survival (Ringing).

The NRS collates data for any species breeding anywhere within the UK. Each nest record gives a potted history of an individual nesting attempt, the recorder indicating where the nest was found, the species that built it and the contents observed on a series of dated visits throughout the nesting cycle. Details of what to record and how to do it are given in the *NRS Handbook*, sent to all participants on registering for the Scheme. Of course, the welfare of the birds is of the utmost importance, and so the *NRS Handbook* also contains a nest recorders' Code of Conduct, which details the 'dos and don'ts' of nest recording which should be followed by all observers to minimise disturbance. Extensive reviews of scientific studies (Götmark 1992, Mayer-Gross *et al.*1997) indicate that visits to solitary nesting birds, particularly passerines, have no significant effect on the outcome of the breeding attempt as long as the guidelines provided are followed. Indeed, while following a breeding attempt to its conclusion is not essential for a nest record to be of value, many recorders do so and a huge number of records reporting successful fledging are submitted each year.

Linnet's nest - traditional nest-finding skills are in danger of being lost. *Dave Leech*

Data can be submitted to the BTO electronically or on standardised paper cards . Counts of eggs and chicks allow us to calculate average clutch and brood sizes, while information about changes in the number of eggs between visits, the timing of hatching and the stage of nestling feather development permit the back-calculation of laying dates (see Crick *et al.* 2003 for more details). Methods developed by the late Harold Mayfield (1961, 1975) also allow estimates of nesting failure rates to be produced. These parameters are calculated on an annual basis for between 80 and 90 species and are used to construct trends in productivity that are published each year in the on-line Breeding Birds of the Wider Countryside Report (www.bto.org/birdtrends). The report is intended to be a "one-stop shop" for information about the population status of our common terrestrial birds, and includes the latest BBS trends too, so it really is well worth a look.

Table 1. Total number of records submitted per region 2007

Region	*Total*
Borders	35
Central	64
Dumfries & Galloway	468
Fife	123
Grampian	116
Highland	705
Lothian	417
Strathclyde	234
Tayside	329
Western Isles	432
TOTAL	**2923**

Table 2. Most commonly recorded species in Scotland, 2007. All species for which at least 20 records were submitted are listed, giving the total number of records submitted and the proportion of the total NRS submission that this represents. Highlighted species are those for which > 25% of the total dataset originates from Scotland.

Species	No. recs	% total	Species	No. recs	% total
Barn Owl	219	11.5	Pied Flycatcher	44	4.5
Sand Martin	**210**	**66.7**	Song Thrush	39	9.5
Great Tit	200	4.5	Little Tern	34	16.7
Blue Tit	194	4.0	**Meadow Pipit**	**32**	**41.0**
Tree Sparrow	184	8.7	Willow Warbler	31	22.0
Swallow	168	6.8	Dipper	28	11.5
Fulmar	**162**	**48.4**	Chaffinch	27	10.0
Kittiwake	130	17.2	Stock Dove	27	4.1
Tawny Owl	**126**	**26.5**	Robin	25	5.2
Common Buzzard	**98**	**40.2**	**Wheatear**	**25**	**46.3**
Blackbird	74	5.8	Jackdaw	24	6.8
Common Gull	**66**	**98.5**	Linnet	23	14.8
Shag	63	16.5	**Red-throated Diver**	**23**	**100.0**
Coot	46	9.2	Wren	23	8.2
Pied Wagtail	46	21.7	Dunnock	21	8.5
Starling	46	20.4	Spotted Flycatcher	21	17.8
Oystercatcher	44	12.4	House Sparrow	20	5.3

NRS submission trends

To date, 1.3 million records of 272 species, the latest addition being Little Egret, have been submitted to the NRS, and a further 30,000 are currently sent in each year by a national network of over 500 volunteer nest recorders. While the number of records submitted each year is still increasing, this trend is not consistent across all species and the group of greatest concern at present are the open-nesting passerines, such as larks, pipits, wagtails, chats, warblers, finches and buntings, for which submissions have been falling steadily since the 1970s (Figure 1). Many of these species have declined in abundance, but some, such as Greenfinch and Chaffinch, have actually increased in number over the last three decades. All, however, build well-concealed nests and it is therefore likely that the loss of nest-finding skills, as well as the opportunity to put them into practice, has contributed to the drop in submissions and it is this aspect of productivity monitoring that needs to be most urgently addressed.

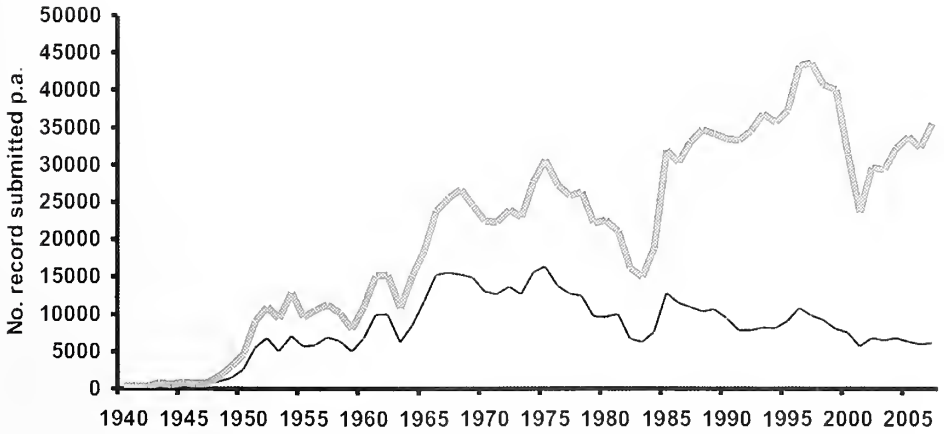


Figure 1. *The total number of nest records submitted to the BTO each year (bold line) is increasing, but the number relating to open-nesting passerines (thin line) has been falling steadily since the 1970s.* *NRS*

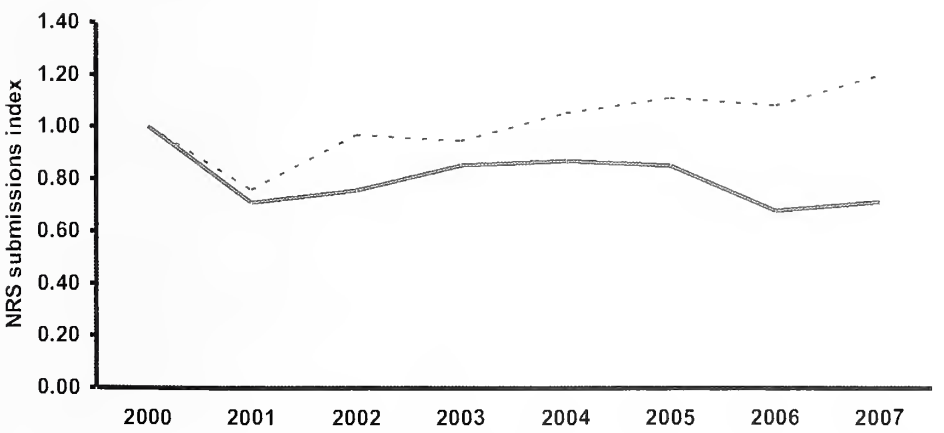


Figure 2. *The number of records submitted from Scotland (bold line) has fallen since 2000, while the number of records from the rest of the UK has increased (dotted line).* *NRS*

Target species for the NRS in Scotland

The situation in Scotland is potentially even more serious, as it is the only UK country for which nest record submissions across all species are currently in decline (Figure 2), having fallen by 20% since 2000 in comparison to a 30% increase across the rest of the UK. Submissions for 2008 are still coming into the BTO, but in 2007, 35,500 records were received in total, of which under 3,000 originated from Scotland (Table 1). The decline in Scottish nest recording is of great concern given the national, and in some cases international, importance of many of the breeding populations present.

It's not all bad news – there are some species in which a great deal of monitoring effort is invested, as can be seen from the figures presented in Table 2, which summarises the total number of records submitted for all species in 2007 where the total exceeded 20 nests. The majority of the Common Buzzard, Tawny Owl and Sand Martin nest recording that takes place in Scotland is thanks to the efforts of a few individuals carrying out long-term

Dipper *John Harding*

monitoring projects. These datasets are incredibly valuable in their own right, and through the NRS also make a very substantial contribution to monitoring at a UK scale. This is particularly important as none of these species are easily monitored via the BBS. Another species that has been intensively monitored in Scotland in the past is Dipper, although numbers of records received have dropped markedly in the last decade. In fact, the extent of the decline in submissions has been so severe that it is becoming difficult to reliably calculate the trend in Scottish Dipper laying dates, which is used by SNH as one of their suite of climate change indicators (Figure 3 below).

One group of species that is particularly poorly represented in the Scottish dataset are the long-distance migrant passerines, many of which are currently experiencing rapid population declines. One of the big questions concerning these declines is whether they are the result of environmental pressures on the UK breeding grounds or on the African wintering quarters. The Willow Warbler is of particular interest, as Scottish populations appear to be stable while those in England, particularly in the south, are in decline, and more data on nesting success from pairs in the North would be very useful. At a national level, failure rates of Willow Warbler nests during incubation appear to be increasing, which may suggest that a reduction in productivity may be contributing to the fall in numbers. Regional variation in trends can provide some very important information concerning the mechanisms underlying population changes and a similar increase in nest monitoring for species such as Wood Warbler, Wheatear, Spotted Flycatcher and Pied Flycatcher would also be very beneficial to this increasingly topical research area.

It's not just the migrant passerines that are experiencing population declines. Meadow Pipit numbers in Scotland have fallen by over 20% since the mid-1990s, while the English and the Welsh populations appear to have remained roughly stable. Could a recent decline in clutch sizes, as identified by analysis of the national NRS dataset, be responsible? Yellowhammer and Starling populations are exhibiting the opposite pattern, remaining stable in Scotland but declining in England and Wales. Both have shown some evidence of recent declines in productivity at a national scale, but the Scottish contribution to the dataset has been relatively small. More nest records are urgently needed to help explore these relationships further.

The NRS does also collect information about non-passerines, and a species of great interest at present is Kestrel (*Falco tinnunculus*), which is maintaining a stable population in England but has declined by 40% in Scotland in just 13 years. Surprisingly for a species that takes readily to nestboxes, very few Kestrel nest records are submitted from Scotland, but analysis of the data at a UK scale suggest that brood sizes may have declined rapidly, falling from approximately 4.2 to 3.6 chicks per brood over a 15-year period. In addition to its important raptor populations, Scotland also holds internationally important numbers of seabirds. While nest records are received from some colonies, there are many more that are not currently included in the NRS dataset and we would be very interested to hear from anyone involved in seabird monitoring who would like to take part.

While the majority of this article has focused on declining species, it is important to point out that much can also be learnt from looking at the demography of birds that are in the process of extending their range. Several Reed Warbler populations in England have been the subject of long-term studies by nest recorders. As the species spreads northwards, so we have the chance to compare breeding success in the core range with that of individuals colonising new areas, which may in turn provide information about the factors that limit current distributions. The population expansion of Nuthatch may well provide similar research opportunities.

Kestrel chicks *John Bowers*

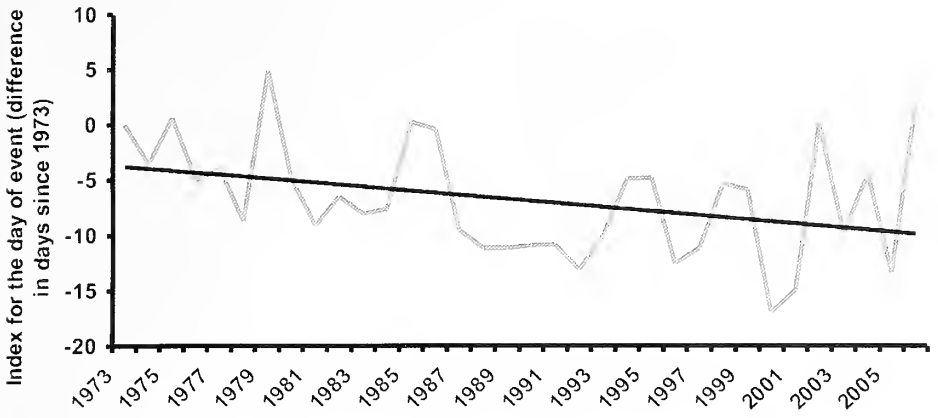


Figure 3. *The NRS laying date trend for Dipper in Scotland is used by SNH as one of their climate change indicators. NRS*

What can we do to help?

The disappearance of key skills within the ornithological community is a serious threat to monitoring of breeding success in the UK, and it is vital that we start trying to reverse this trend as quickly as possible. We are extremely fortunate to have received a generous legacy from Dilys Breese, a long-time BTO supporter and Council member, which we are investing in a number of new NRS initiatives.

The first undertaking has been a redesign of the support materials, creating a new all-colour *Quickstart Guide* to introduce new recorders to the scheme and its methodology, while simultaneously updating the *NRS Handbook* to provide more guidance for those already taking part. Work on a complementary revision of the NRS website (www.bto.org/goto/nrs.htm) will begin in 2009. Much of the new on-line material will focus on nest finding techniques and equipment, and will be written by experienced nest recorders, making sure that any top tips they have can be disseminated to fellow enthusiasts and preserved for posterity.

While written materials can be really useful, there is really no substitute for experience in the field. The logistics of setting up a nest finding training course are far from simple, but the inaugural event at Icklesham, Sussex in May 2008 showed us that it can be done, the mastery of Tony Davis ensuring that all the participants got a good deal of experience in finding Sedge Warbler nests, even though most of the *Sylvia* warblers had already fledged. We're in the process of putting together three more courses for 2009, of which one will be in Scotland. Ultimately, the establishment of a mentoring system, as used by the Ringing Scheme, is likely to lead to more effective training. We're already beginning to build this network, so if anyone would be interested in either becoming a mentor or going out in the field with an experienced nest recorder then contact us at nest.records@bto.org.

Development of on-line nest recording is another priority for the NRS, and the Nest Box Challenge (NBC), launched in 2007 in partnership with the BBC's Breathing Places campaign, represents a significant step towards this. Members of the public can visit the NBC website at www.bto.org/nbc and enter information about nesting attempts in their nestboxes using a simplified version of the NRS methodology. In future years, the system will be extended to cover open-nesting species, providing important information about productivity of declining species, such as Dunnock, in areas of human habitat and helping to determine whether their breeding success differs from that of individuals nesting in the wider countryside.

How can you help?

The obvious answer is – become a nest recorder. Whether you're a keen gardener who chances across the odd nest or a dedicated patch birder who takes pride in identifying the breeding location of every pair of warblers in the area, you can help conservationists to help the birds by contacting us at: Nest Records Officer, BTO, The Nunnery, Thetford IP24 2PU. Email: nest.records@bto.org

But opportunities to help don't end there. We're constantly on the lookout for potential venues for training courses and opportunities to promote the scheme, both through talks and written articles, so if you've got some good ideas then please drop us a line.

Dave Leech, Head of the Nest Record Scheme, BTO

Acknowledgements

We are incredibly grateful to the hundreds of volunteer nest recorders who, over the years, have contributed their time and efforts so extensively and freely to make the NRS such a valuable part of the UK's natural heritage archive and wildlife monitoring framework, and to Mark Cubitt for developing the Integrated Population Monitoring Reporter (IPMR) inputting and submissions system. The generosity of Dilys Breese has allowed us to initiate a development plan that will have a very significant impact on the NRS. The Scheme has also benefited greatly from the support given under the JNCC/BTO partnership that the JNCC undertakes on behalf of English Nature, Scottish Natural Heritage, Countryside Council for Wales and the Environment and Heritage Service in Northern Ireland.

The decline in the Willow Tit breeding population in Lanarkshire was duly recorded through data sent to the Nest Record Scheme. Here we see a successful pair in action at their nesting cavity in a wood near Larkhall.
Jimmy Maxwell

Stopping wildlife crime – how YOU can help

Poisoned Kite – Perthshire June 07 *RSPB Scotland*

In the December 2008 issue of SBN, we summarised recent developments in the detecting, investigation and prosecution of wildlife crime in Scotland. In recent months, the picture has become more positive, with considerable media interest, and positive noises coming from Holyrood.

However, the fact remains that wildlife crime continues to be a blight on Scotland's countryside. In May 2008, a White-tailed Eagle, fledged from a nest on Mull the previous year, was found dead in an Angus glen. Tests by the Scottish Agricultural Science Agency laboratory, just outside Edinburgh, revealed that it had been poisoned with carbofuran, a chemical banned from use since 2001, and other pesticides. A follow-up visit to the area by Tayside Police and RSPB Investigations staff found a dead Buzzard, later confirmed poisoned, 32 pieces of meat placed on fence posts and a mountain hare bait, all laced with the same lethal chemical cocktail that had killed the eagle.

2008 also saw poisoned Red Kites, Ravens and Buzzards; Hen Harrier and Peregrine nests failing mysteriously with no signs of predator activity and a number of birds of prey found shot. Despite all the good intentions, this is the same pattern as 2007, 2006, 2005 and all previous years.

Our priority is to tackle wildlife crime that has a significant impact on the conservation of scarce species in Scotland; this sadly still means that much of our efforts go towards tackling the persecution of birds of prey, carried out by the illegal use of poisons, nest destruction, illegal use of traps or by shooting. It's pretty obvious that recorded wildlife crime, and particularly bird of prey persecution, must represent the "tip of the iceberg" with regard to what is actually happening in our countryside. The effect of this on national populations of some of our more iconic species was clearly illustrated by a recent SNH report which stated "A number of lines of evidence indicated that illegal persecution of eagles, principally associated with grouse moor management in the central and eastern Highlands, is the most severe constraint on Scottish Golden Eagles." *Whitfield et al (2008). A conservation framework for Golden Eagles: implications for their conservation and management in Scotland. Scottish Natural Heritage Commissioned Report No.193*

RSPB investigations staff undertake targeted visits to areas with a recent history of wildlife crime, they carry out checks of nest sites and follow up reports received from members of the public. However, Scotland is a big country, with lots of land seldom visited by walkers, birdwatchers, fishermen or anyone else. Much bird of prey killing takes place in remote areas on private ground, in circumstances where direct witnesses are few and far between. Material evidence can be easily concealed or destroyed by the perpetrators and much of it must never come to light. This is where you can help! There are only a few of us, and we can't be everywhere, so we would like to use your eyes and ears to help us find the evidence that may lead to a serial wildlife criminal being convicted.

How you can help

2009 marks the second breeding season during which fieldwork for the new Bird Atlas will be taking place. This means that lots of birders will be visiting areas well off the beaten track, just the sort of places where you may stumble across something a bit dodgy. If you're not birding, you may be going hillwalking or fishing. You may find something suspicious. If you do, we want to hear about it!

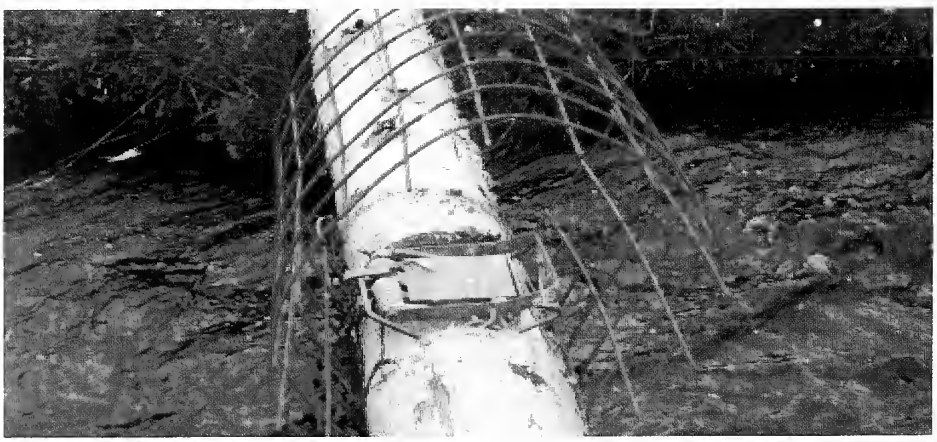
What to look out for:

Nest destruction or disturbance – are you monitoring breeding birds of prey? Maybe a nest has failed suspiciously? Human interference may not always be obvious, so unless the nest has obviously been predated, we would like to know about it. Remember, you must have a licence to visit the nests or to disturb breeding schedule 1 species like Merlin, Peregrine, Hen Harrier or Golden Eagle.

Dead things - especially birds of prey, particularly if the circumstances are unusual (*ie not a road kill or collision victim*). Similarly species such as Ravens, crows and gulls can be victims of poisoning, so if you find any of these in an unexpected or suspicious location, please tell us.

Crow cage traps or Larsen Traps are a legal method of control of several crow species, subject to strict conditions of use. However, there is widespread evidence that these conditions are not always followed. Please let us know as soon as possible if you find any of these traps containing birds of prey or if there is any doubt about the legal use of the trap or welfare of captive birds. Remember it is an offence to tamper with these traps.

Spring traps are another legal method of "pest" control and are primarily used to target stoats, weasels or rats. They have to be used under cover, in a natural or artificial tunnel and are often used on logs over streams covered by wire mesh. Again, it is an offence to tamper with these traps but if you come across one set in the open – on



Spring trap surrounded by mesh on a log – legal or not? *RSPB Scotland*

the ground or on a post – or one that has trapped a bird or animal like an otter or red squirrel, please tell us.

Baits can be difficult to identify! Lots of animals die naturally, but if you come across a corpse in an unusual place for example on a fence post or rock that is unlikely to have died there. Similarly, predated corpses don't tend to be cut neatly in half, or lying on their back with all their legs spread apart. It is normal to find predated eggs during the breeding season, but finding hens' eggs lying on a hillside or seeing a clutch of pheasant eggs by a rock in January is not normal. If you come across anything you think may be suspicious, **do not touch,** but let us know.

Mountain Hare poisoned bait *RSPB Scotland*

In all these examples, it can take an experienced eye or even a post mortem in a laboratory to separate the legal from the illegal, or the natural death from the suspicious. However, we would rather spend four hours walking to a potential poison bait that turns out to be a false alarm, than to not hear about it!

If you do come across any of these, or witness anything you think may be illegal, please try to note down as much information as possible, but particularly:

- ***What*** *is the incident? Eg. a dead Buzzard has been found.*
- ***Where*** *was the incident? 4 or 6 figure Grid Reference/site description/address.*
- ***When*** *was the incident? Date (or range of dates eg. 1–10th May 2007) and if possible, time.*
- *Can you tell us about any suspect/s? **Who** was it? Name? Male/female, age, description, vehicle reg no./make/colour. Did you get any **photos**? If yes, can you email or send them to us? Have the **police** been informed? Can you let us know the name of the officer/police station dealing with the case.*

Lastly, don't touch anything – this may be a crime scene and may involve very toxic chemicals!

Please treat any information as confidential and let us, or the police, know as soon as possible.

How to report a wildlife crime:
Contact RSPB Scotland Investigations Team:

Bob Elliot: 0131 311 6515.
Email: Bob.Elliot@rspb.org.uk

Ian Thomson: 0131 311 6587.
Email: Ian.Thomson@rspb.org.uk

Elsie Ashworth: 0131 311 6556.
Email: Elsie.Ashworth@rspb.org.uk

We share incident details with the police and National Wildlife Crime Unit. Your contact details will be held confidentially or recorded as anonymous if you wish.

Or, by the RSPB Website: http://www.rspb.org.uk/ourwork/policy/wildbirdslaw/report.asp - or, contact the local police force and ask to speak to a Wildlife Crime Officer or, call Crimestoppers anonymously on 0800 555111. ***We look forward to hearing from you!***

Rare Breeding Birds - guidelines on their recording

Spring is now underway and many SOC members will be out in the field collecting records for the BTO/BirdWatch Ireland/SOC Bird Atlas project, or just out enjoying birdwatching in the warmer weather and longer days. During the course of these outings, many of you will actually come across some rare breeding birds, perhaps a Wigeon, a Pochard or a Pintail, or a calling Quail, a diver on a nesting loch, a Peregrine alarm calling or a Dotterel on the high tops. All of these species, and over 100 others, are monitored by the Rare Breeding Birds Panel (RBBP) on an annual basis, largely based on the observations of birdwatchers submitting their records to the local bird recorders. The Panel produces a report, published in the monthly journal, *British Birds*. The next report, covering the 2006 breeding season, will be published in the April issue of British Birds, and the report for 2007 will be published before the end of this year. All previous annual reports produced by the Panel are available on our website www.rbbp.org.uk. You can also see the full list of species monitored by the Panel on this site.

The Panel has developed new guidelines to help observers record the most relevant facts about their observations, and a copy is included with this issue of SBN. Please read it and help us improve the standards of recording of some of our rarest breeding species. Better quality records will greatly assist in our understanding of the status and distribution of the rarer breeding birds in Scotland and the rest of the UK, allowing us to identify population trends and direct conservation effort. This leaflet explains the background to the work of the Rare Breeding Birds Panel, and why good quality data are essential in allowing the collation of the most robust and reliable statistics on these species.

In particular, we would like to draw your attention to the following key points:
(1) Records of rare breeding birds should be submitted in the first instance to the local recorder (all Scottish bird recorders are listed on the SOC's website). This enables the recorder to view all records of a species at a site in a year so that he or she can collate meaningful end-of-season summaries of the numbers and status of each species on the RBBP list for their bird report, and also submit detailed data to RBBP.

(2) Each record should give an indication of the breeding category of the species. The same categories (possible, probable and confirmed breeding) used in Atlas fieldwork are also employed, and the full list of codes and guidance in their use are given in the leaflet. A record of a pair which gets to the point of laying eggs is classed as confirmed breeding, regardless of whether they are ultimately successful or not, and these records are the most important of all.

(3) Accurate recording of the location of a breeding (or potentially breeding) pair is imperative. This allows RBBP and the recorder to be able to distinguish different pairs and ensures that the confidential, UK level, archive maintained by the Rare Breeding Birds Panel is accurate. Maintenance of the archive ensures that data on rare breeding birds is never lost and can ensure that the protection of the birds is not compromised. Secrecy over the nesting locations of Honey-buzzards in southern England a few years ago meant that an alleged egg thieving incident could not be verified as the nest sites had not been made available to RBBP and no-one else had access to this information. The Rare Breeding Birds Panel is an independent body and all information held is confidential - details are only made available under strict control to *bona fide* individuals. RBBP has the respect of the ornithological community and there has been no loss or leakage of sensitive data in its 37 year history.

Please read the enclosed leaflet and keep it for reference for when you do find a rare breeding bird this summer and in the future.

Mark Holling (RBBP Secretary)
on behalf of the
Rare Breeding Birds Panel

Birding in Vermont (Part 2)

Vermont Fall colour *Richard Daly*

In SBN 90, Richard Daly introduced us to the natural delights of the wild trails in one area of Vermont. He now continues to explore...

As we pursue our journeys in Vermont, the scene changes from the shorelands of Lake Champlain to the habitats of the Green Mountain regions and adjacent areas.

Smugglers' Notch and Mount Mansfield

Vermont's *Long Trail* stretches from its southern border with Massachusetts to the Canadian border. It reaches its highest point at *Mount Mansfield*, Vermont's loftiest peak at 4,393 feet. The drive up the loose grit mountain road with its hairpin bends can produce some "white-knuckle" moments before reaching the visitor centre car park at 3,849 feet. There is a one and a half mile moderate trek to the summit via Frenchman's Pile with superb views looking west to Burlington, Lake Champlain and the Adirondack Mountains, and east to the White Mountains' Presidential Range and the highest peak in New England, Mount Washington (6,288 feet). We picnicked on the mountain and logged up Raven, American Robin, a lovely Dark-eyed Junco and a first year brownish Yellow Warbler. A fine Red-tailed Hawk circled overhead, its red tail prominent against a blue sky. The great treat, however, was our first ever Bicknell's Thrush, a bird which winters in the Dominican Republic and breeds in the spruce-fir woodlands of Vermont at high elevation. The "slide" down the grit road was as hair-raising as the climb up!

The drive from Mount Mansfield (in the direction of Jeffersonville) arrives at *Smugglers' Notch Ski Resort*, which forms the hub for a variety of woodland, meadow, and mountain nature trails. A number of these comprise "wikes", which the guide notes describe as more demanding than a "walk" but less so than a "hike"! We chose to climb up an alpine meadow for some 600 feet, which took us through a wonderland of wild flowers (Black-eyed Susans, Orange Milkweed, Pearly Everlasting, Red Clover, Calico Asters and Daisy Fleabane amongst many others). The experience was almost surreal with hundreds of butterflies surrounding us (Monarchs, Red Admirals, Orange Sulphurs, Clouded Yellows, Pearl Crescent, Great Spangled, Meadow and Bordered Fritillaries and the tiny Eastern-tailed Blue). Dobbies Butterfly World has nothing like this! We eventually joined the *Wire Road Trail* where five Northern Flickers were "foraging" in long grass and a very noisy "pneumatic" drumming revealed a very busy Pileated Woodpecker, whilst as we headed down the woodland path a Red-eyed Vireo was added to the list.

Monarch butterfly *Richard Daly*

Stowe and Weissner Woods

The small town of Stowe, with Mount Mansfield towering above, is indeed "Sound of Music" land with the vast Von Trapp family estate and inn on its outskirts. (The Lemon Frangipane Torte and Black Forest Gateau in the Trapp Tearoom are of course essential after the drive down Mount Mansfield!) The real attraction of Stowe is the Weissner Woods and their beautiful forest trails. Granted to the Stowe Land Trust in 1993 by the Weissner Family in memory of their father, Fritz (who was an ardent conservationist), the Trust is required to preserve the woodlands in their natural state. The mixed woodland is approached from a flower-covered meadow. We headed off on the *Catamount Trail*, as a Winter Wren made a beeline for the dense undergrowth and quickly came upon two Brown Creepers on some pine trunks. Twitterings in the foliage suggested the presence of about five birds. After much searching two were located, first a Common Yellowthroat and then, as it moved out to a sunlit bare branch, a strikingly lovely Blackburnian Warbler, still very much retaining its breeding plumage. As we picked our way through the numerous tree roots on the trail path, we came across an Eastern Ribbon Snake, which had fine

Eastern Chipmunk *Richard Daly*

patterned markings. The soft drumming of a Hairy Woodpecker caught our attention and we watched it for about 20 minutes and took several photographs – everything in sharp focus except the head, which moved at great speed as it sustained its attack on the tree bark! Our wanderings took us onto the *Meadow Trail* and *Hardwood Ridge Trail* with Blue Jays and Black-capped Chickadees in good numbers. On a small pond at the trailside we found a large number of Common Water Striders caught in the sun's rays as they skated over the water. Back in the meadow at the entrance to the woods, a Viceroy butterfly flew languidly across the wild flowers. The Viceroy is often mistaken for the Monarch but it is smaller and has a distinctive line running close to the wing edge. The Monarch is toxic to birds. Amazingly, the Viceroy evolved in appearance to mimic the Monarch and thus scare off predators.

Birds of Vermont Museum and Green Mountain Audubon Bird Reserve

These venues are situated close by each other, near to the town of Huntington. The Museum is unique. Bob Spear first began carving birds in wood in 1938. He is now 88 years old and still actively carving. Originally, he set out to carve all Vermont's bird species, then extended that to achieve carvings of all North American birds! By the time of our visit he had achieved some 470 very detailed, life-sized carvings of birds, all in stunningly realistic poses with accurate plumage colouring. His group of Tyrant Flycatchers, some with wings outstretched, looks real enough to take flight. This place is a must for any birder visiting Vermont. The Museum has a large observation window looking onto a variety of feeders. In a 15-minute spell we had Blue Jays, Red-breasted Nuthatch, Purple Finch, Mourning Dove, American Goldfinches, Ruby-throated Hummingbird and, all together on the same feeder, seven Hairy Woodpeckers. Picking up any scraps which fell to the ground were Red and Eastern Gray Squirrels, whilst a Green Frog looked on in wonder at the goings on. The short *Pond and Bench Trail*, which leads out from the Museum, produced Red-legged Crickets and Snowy Tree Crickets.

Beaver Lodge *Richard Daly*

The nearby Green Mountain Audubon Reserve (300 acres) has five miles of track. We covered the *River Trail*, *Beaver Ponds* and *Hemlock Swamp*. At the Beaver Pond, I almost stood on a Painted Turtle resting in the longish grass. Four more were seen "tobogganing" into the pond down the foliage of a tree felled by beavers.

Barred Owl (Gouache) *Richard Daly*

Vermont Institute of Natural Science (VINS)

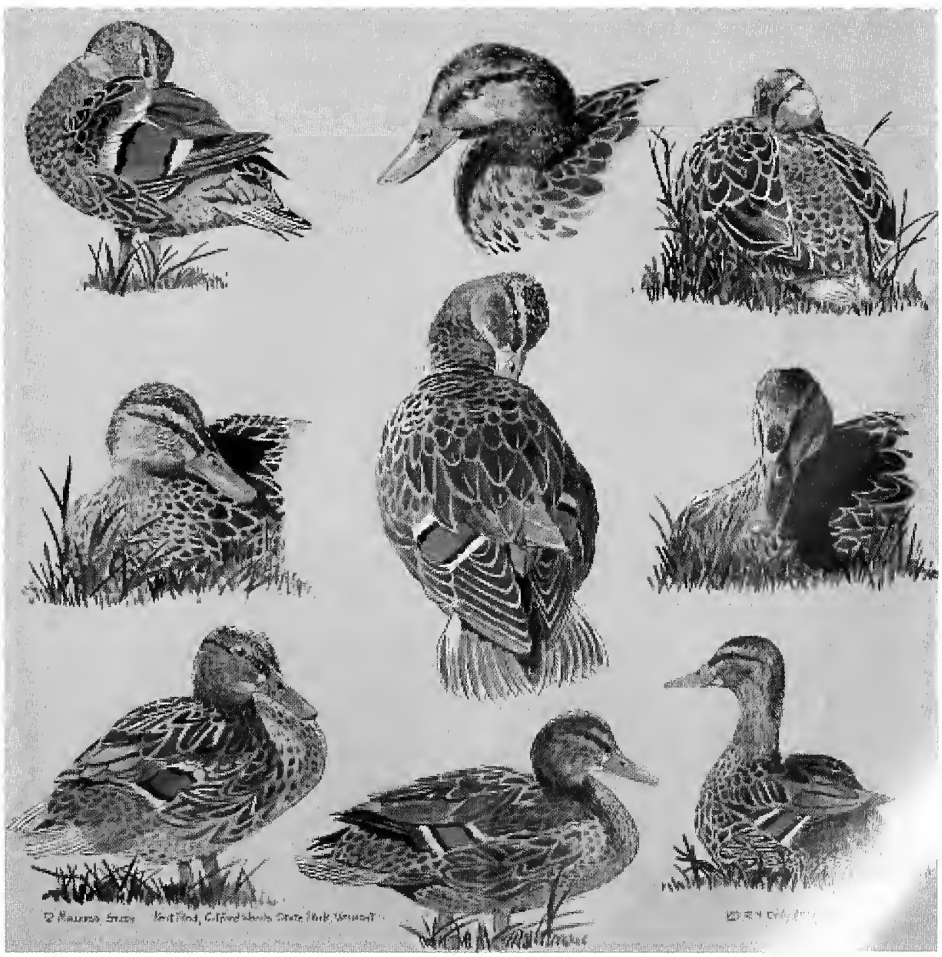
From the Stowe area VINS is reached via Route 89 to Quechee Gorge and onto nearby Woodstock. VINS has a number of different activities and functions, one of which is to care for injured birds. In the nine months preceding our visit it had dealt with 358 birds, of which some 250 were successfully released back into the wild. Some do not survive their injuries; others are retained, cared for, and used for educational purposes. Most of the raptors we saw had suffered wing damage and had limited flight capability due to car strikes. Amongst the owls and raptors being permanently cared for were Northern Saw Whet, Great Gray, Great-horned and Barred Owls, as well as Bald Eagle, Cooper's Hawk and Ferruginous Hawk. After viewing these birds we followed the VINS trails (*Lingelbach* and *Laughlin*) along the Ottauquechee River backwater and past Vernal Pond. As usual, Eastern Chipmunks were plentiful, as were American Robins, Blue Jays and Chickadees, but a neat Marsh Wren and a Warbling Vireo joined an Eastern Phoebe to round off a fine woodland stroll.

Gifford Woods State Park and Natural Area

At Killington in the Green Mountains we spent a couple of days exploring part of the *Appalachian Trail* and nearby *Kent Pond*. Amongst our sightings there, we enjoyed Common Grackle and Cape May Warbler. However, the highlight was a superb group of Mallards, which we spent ages observing over the two visits. Clearly, despite the joys of Vermont, we were getting a bit homesick for the local ducks in Doune Ponds!

Space only permits a brief coverage of the many great birding venues in Vermont. We spent a month there in the Fall. There is hardly room to mention the Semi-palmated Plover or Eastern Screech Owl, far less the Red Cardinals and the others in our log of 154 species of birds, butterflies, mammals and insects. No moose or bears were seen on this trip, and the last proven cougar sighting in Vermont was probably in 1934! A tranquil and lovely spot to visit, Vermont has a wide range of beautiful, sometimes exotic, wildlife.

Richard H. Daly



Mallard study (Gouache) *Richard Daly*

Bird Atlas 2007–11, the second breeding season

On the first of April 2009, fieldwork for the second breeding season of the 2007-11 Bird Atlas project will get underway. Large numbers of SOC members are getting involved either by submitting Roving Records via the www.birdatlas.net website or by undertaking Timed Tetrad Visits (TTVs).

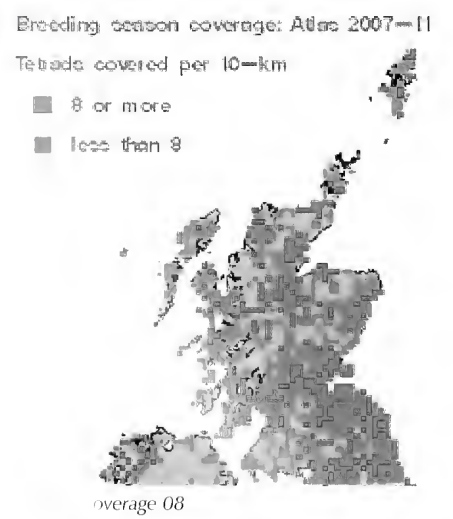
Twite *Linda Baillie*

TTVs

If you can identify most birds by sight or sound then conducting Timed Tetrad Visits is the best way to help out. At least 8 tetrads (a 2x2 km block) need to be covered in each 10km square. In some parts of Scotland, where local atlases are being conducted, all 25 tetrads in each 10km square need coverage. This will be quite a job. The first breeding season got off to a flying start. We managed to get 40% of the required minimum coverage for the national project (Figure 1). By the end of the project we need to turn all Scotland red. Most parts of Scotland still need help, but areas that are grey or yellow on the map are in greatest need of assistance. In particular much of Galloway, Argyll, north Perth, Wester Ross, the Hebrides and Aberdeenshire.

Please help by taking on some tetrads in your home area, but if you are holidaying in remoter areas of Scotland you may well be able to help out there as well, especially if you are visiting in late May and June. Contact the local Atlas organisers or bob.swann@bto.org if you feel you can help in this way.

Doing a TTV is good fun. You choose your own route, trying to visit as many habitats as possible in the hour, in order to see and count as many species as possible. It is a good way of testing your birding skills. Only two visits are required. The first should be in April or May, the second in June or July. Feedback from observers conducting TTVs last summer indicated that by July a lot of birds had already completed breeding and moved out or were more difficult to locate as they had stopped singing and started their annual moult. If you are only doing a few tetrads the ideal scenario would probably be to do the first visit during late April or May and the second in June.



overage 08

Roving Records

The other way to contribute to the Atlas is by submitting Roving Records. The aim here is to build up species lists for each 10km square, or where local atlases are being done, each tetrad. Each species only needs to be recorded once to put the dot on the map, though we would like it recorded at the highest level of breeding category possible (see below). In order to find out which species are missing from a given square or tetrad you can log onto www.birdatlas.net click on the **Any Square Summary** button, then put in the details of a 10km square or tetrad in order to get a print out of all the species recorded so far and for each, the highest recorded breeding evidence category. Any extra species, or any species for which you can supply higher breeding evidence categories should be added as Roving Records.

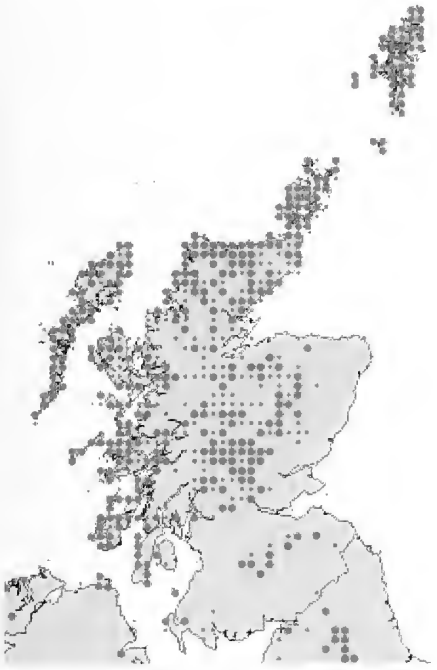
Breeding Evidence Codes

We are really keen that virtually all breeding season records should be accompanied by a breeding evidence code, with only a few exceptions, which are explained later. These codes can be found on the back of all Atlas forms.

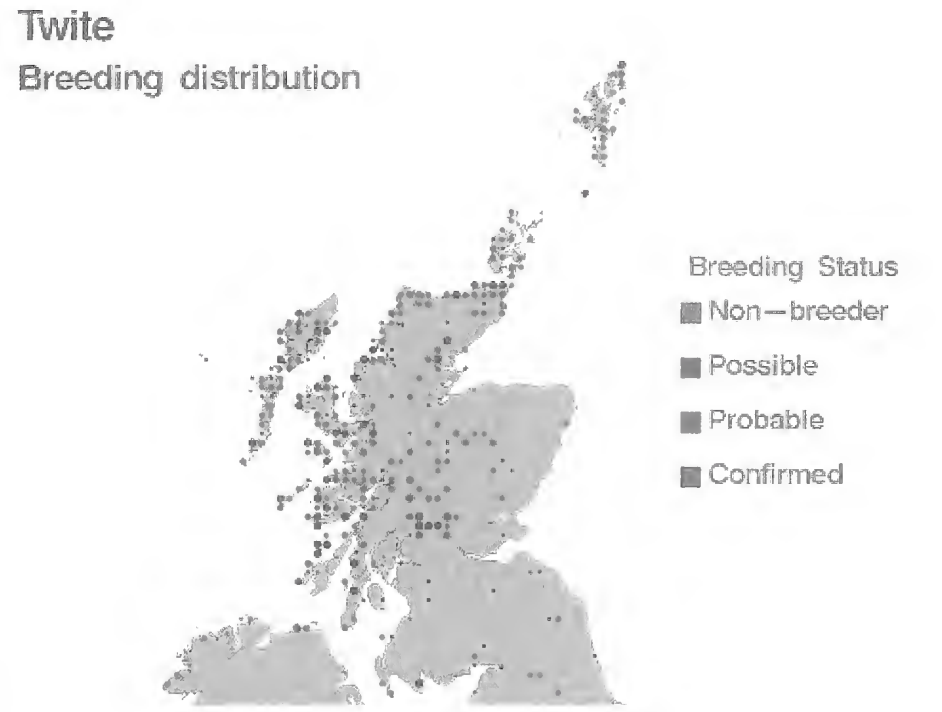
We are also keen that the code be at as high a level as possible. Most regular breeding species, for instance a Treecreeper in your local wood, should at least be given a code such as H, indicating present in suitable breeding habitat or S, if you hear it singing. These possible "breeding" category codes, can often be boosted to the "probably breeding" category by use of codes such as P, indicating a pair in suitable breeding habitat, or T where not one but several (territorial) birds are singing in a given habitat. Codes like A (agitated) where birds are alarm calling as you approach them are also useful. To prove confirmed breeding it is not necessary to find a nest (NE – nest eggs or NY – nest young). Birds carrying food or faecal sacs (FF) or the presence of recently fledged dependent young (FL) are often easier ways to confirm that breeding has taken place. For some species like waders, birds getting exceptionally agitated can be coded as DD (distraction display).

There are a few species we need to be a bit careful about. Herons, gulls and terns will often feed well away from breeding colonies. They should either be coded U (summering) or just not coded at all. Particular care must be taken in late summer when many juveniles have dispersed well away from breeding areas, they should not be coded as FL as they are no longer dependent on their parents. Terns and gulls can be even more awkward as here young still dependent on their parents can disperse large distances from breeding areas. Again in these instances it is maybe best not to code these birds.

F for Flying is a code that is often misused. It really refers to birds completely overflying an area like migrating geese. Raptors, Swifts, martins and Ravens flying over an area are probably using the habitat as they search for food and should probably be coded as H, rather than F.



Twite – old coverage



Twite – summer 08

Ups and Downs

Having had one complete breeding season, we can already start to see which species are doing well and increasing their range in Scotland and which are doing badly. For the latter category, we can only speculate as not all the results are in yet. The map for Twite (Figure 2b) is a good example. It appears to show a major contraction in range when compared to the map from the 1988-91 breeding atlas (figure 2b). Is this real or is it due to under recording? Certainly some areas like the Southern Uplands and many parts of the Highlands have been well covered, but Twite have not been recorded suggesting that they have declined. A lot more data will require to be gathered, however, before we can confirm these observations.

Please do get involved in this SOC/BTO project. It is easy to submit data and the information gained will help direct conservation research for the next decade or more. This is your way of putting something back into your birdwatching.

Bob Swann,
Scottish Organiser, Bird Atlas

BIRDSPOT:
Grey geese in flight

March and April are the months when our geese start to return northwards, and migrant flocks can be seen overhead virtually anywhere in Scotland. For most of us the main species involved will be either Greylags or Pink-footed Geese on their way north-west to Icelandic staging and breeding grounds - but how to identify those distant flocks?

Calls

Many over-flying goose flocks are first detected by their calls. Greylags have a very distinctive honking, drawn-out and not particularly pleasing to the ear "a*ahng*-a*ahng*". This is the same call as that used by their domesticated farmyard descendents, which makes it easy to remember. Pink-feet on the other hand have a much livelier and brighter call, based on variations of a short, clipped "*ang-ank*" call, usually interspersed with a few brighter and higher-pitched "*wink-wink*" calls. Lots of birds calling like this can sound not dissimilar to a distant pack of barking hounds.

Size and shape

Size is hard to judge with birds in flight, particularly if they are high or distant. And I've yet to see a flock of Greylags or Pinks that didn't include at least one particularly large (adult male?) or particularly small (young female?) individual, which can lead you astray. However, the larger size of the Greylag is reflected in its "heavier" flight action and slightly slower wing-beats, sometimes reminiscent of the flight action of a Cormorant. Pink-feet are more compact and shorter-winged. Greylags often droop their necks below the horizontal in flight and this can be very distinctive (see picture). The neck, head and bill of Greylags are more thickset than those of the Pink-feet. The short bill of the Pink-foot gives a neater shape to the bird's front end, and this overall impression can be seen at considerable distance.

Plumage and colour

Finally, if the birds are close and the light good, there are clear differences in plumage. Greylags are generally paler and show more contrast between the pale upper and lower forewings and the darker flight feathers. Pink-feet are more uniform in colour, only the upper forewing being grey, with subtle buff shades to the underparts merging with the dark head and neck.

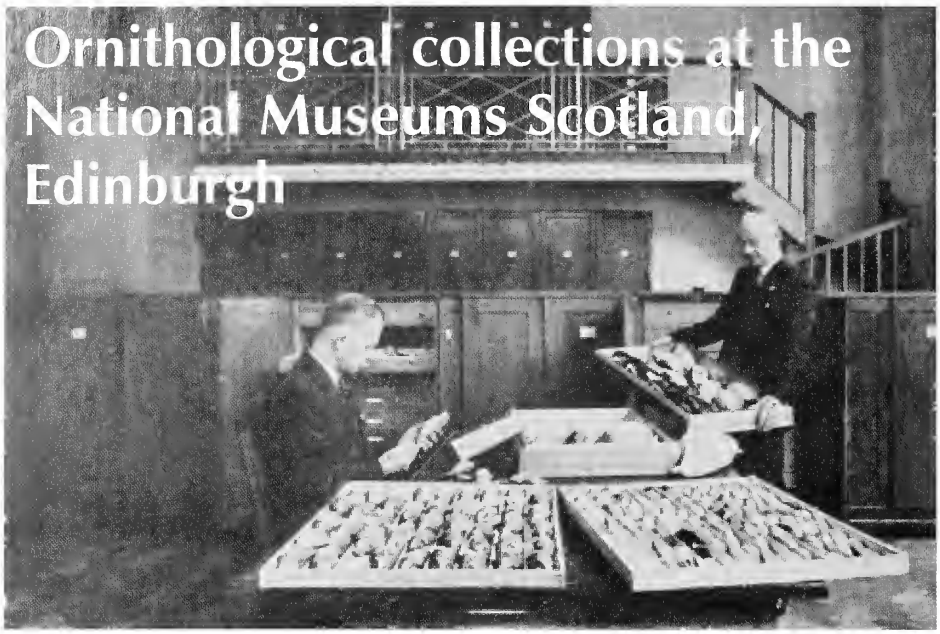
Overall the Pink-foot is a more classy and elegant bird than the poor old Greylag. B both are equally impressive when f their way northwards over hill and to their summer breeding grounds

Greylags (left), Pink-footed Geese (right)

Clive McKay

Clive McKay

Ornithological collections at the National Museums Scotland, Edinburgh



Museum Bird Room pre-1958 *NMS*

For many people the 'bird collection' at National Museums Scotland (NMS) is the array of mounted specimens displayed in the public galleries (most of which closed in 2008 for redevelopment, but a few birds remain on display in Beginnings, Museum of Scotland). However the mounted birds are only about 6% of the collection, and most of the Museum's holdings are 'cabinet skins' in the research collection. This article has two aims: I shall outline the history the collections, mentioning some of the important ornithological acquisitions; and I shall describe the types and scope of material held and consider some of the uses to which it has been put by researchers.

History

The history of the Museum's bird collections may be considered as comprising four eras.

1) Prior to 1854 the collections were formed by the 'Toun College' [later the University] of Edinburgh. The origins of this collection may be traced back to the bequest of Sir Andrew Balfour (d. 1694), and the presentation of Sir Robert Sibbald's collection (1697). However, much of these earlier collections were lost or destroyed and the collection which in 1854 passed into government ownership to form a national museum was that amassed by Professor Robert Jameson who held the chair in Natural History at the University from 1804-1854. Although Charles Darwin, as a student, found his lectures dull, Jameson inspired many of his former students to collect and donate material. He also fostered relationships with the Admiralty and acquired specimens from naval and other expeditions which still survive today: for example Arctic material from William [illegible]rry, John Franklin and John Richardson, [illegible] from South Africa specimens from Sir [illegible] Smith. An important addition was the collection of Louis Dufresne, a Parisian taxidermist, purchased by the University in 1819. Part of his bird collection survives, including two eggs of the Great Auk *Pinguinis impennis* and one of only three specimens of the extinct Mauritius Blue Pigeon *Alectroenas nitidissimus*.

By 1854, when the collection became part of the government-funded Industrial Museum of Scotland, it comprised over 74,000 items. In addition to donating its collection, the University also granted a plot of land to the west of Old College as the site (in part) for the new public museum. By the time the buildings on that site had been demolished and a new purpose-built museum erected, government had renamed the institution the Edinburgh Museum of Science and Art, which opened in 1866.

As the primary aim for establishing a national collection was public education, the new museum was designed to provide exhibition space and virtually all of the collections were displayed, as they had been in the University, to illustrate the diversity of the Animal Kingdom.

2) The next main era of development of the Natural History Department was 1873–1918, following the appointment of Ramsay H. Traquair as Keeper. Acquisition of exhibition specimens was paralleled by the assembly of 'research collections' or 'cabinet collections', for exclusive use in scientific examination rather than for display. For example, in 1889 the Museum purchased 700 mainly North American skins from Henry E. Dresser, and in 1896 it acquired over 2,000 skins, mainly Malaysian, from R. G. Wardlaw-Ramsay, collected by himself and his uncle, Arthur, 9th Marquess of Tweeddale. Biometrics – standardised measurements of lengths of wing, bill, tarsus, and tail – were becoming established practice in the description of bird taxa and for studying variation within species, and the development of the skin collection (as an 'archive') allowed close study and comparison of individual birds from within and across geographical ranges.

Traquair retired in 1906 and was succeeded by William Eagle Clarke, an ornithologist who had been on the Museum staff since 1888. By this time the Museum had again changed name to become the Royal Scottish Museum and Clarke set about expanding the bird collections and redeveloping exhibitions – including, for the first time, painting bills and legs to more closely resemble their colour in life. Clarke's tenure as Keeper coincided with ambitious plans to extend the museum building southward so increasing exhibition space. In the event the expansion plans were delayed by World War I. Clarke was also involved in fieldwork and became

Eagle Clarke on the face of the E. Cliffs of St.Kilda, Oct.1911 *NMS*

recognised for his studies on bird migration. He collected in France, at the Eddystone Lighthouse, and on the Flannan Islands, Orkney, Shetland and St Kilda, and his fieldwork resulted in hundreds of skins being added to the Museum's bird collections. To assist in recording and collecting migrating birds, he recruited George Wilson Stout, Jerome Wilson and Rear-Admiral John H. Stenhouse as collaborators in the Fair Isle studies. Of course the Museum's broadly-based collections and comprehensive library meant that the work of Clarke (and others) was not geographically-restricted. For example, he published details of three collections of birds made by W. A. Keay in the Philippines. Keay, from Broughty Ferry, was a sugar plantation owner who collected and brought back to Scotland about 170 bird skins. Clarke's publications on these included range extensions of several species and the description of a new species of dove, the

Negros Bleeding-heart *Gallicolomba keayi*. Larger collections from more focussed expeditions included birds from Svalbard, Franz-Josef Land and the Antarctic collected by William Speirs Bruce. The Gough Finch *Rowettia goughensis* was first described by Clarke from specimens brought back from Gough Island by Bruce's Scottish National Antarctic Expedition. More numerous than these 'discrete' collections (whether smaller or larger), were the many donations of single (or a few) birds – for example, William Berry of Tayfield presented a total of 220 birds in 120 separate donations between 1891 and 1937. An analysis of the bird donations in 1910 shows that 375 specimens arrived in 47 lots; only five were purchases, the most expensive one being £5 paid to Jerome Wilson for 85 skins from Fair Isle. In the same year almost 300 clutches of eggs were acquired including 60 from Tibet, 194 from India and 21 from Australia.

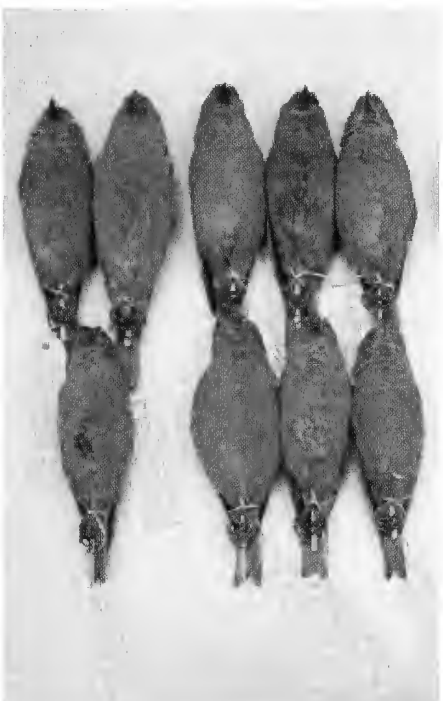
As an innovation, Clarke encouraged donors to sponsor exhibits. These were tableau showing the nesting sites and behaviour of British birds, commissioned from taxidermist Charles Kirk of Glasgow, many of which remained on display until 2008. With the development of new galleries in the 1920s, many of the older mounts (including a number of Dufresne specimens) were removed from exhibition, remade (relaxed) as cabinet skins and incorporated into the research collections. This process prevented further fading of plumage which they had experienced in brightly-lit galleries and made these historically valuable specimens more readily accessible for research.

3) In 1917 the bequest of nearly 1,500 skins and 1,000 clutches of eggs from John Alexander Harvie-Brown boosted the collection's breadth. In 1921 the important collections of the Scottish National Antarctic Expedition comprising thousands of skins and eggs were acquired from the Scottish Oceanographical Laboratory. In 1925 the museum acquired the Australian collection of Sir Malcolm Donald McEacharn, including 400 bird skins and 570 clutches of eggs, mostly collected by G. A. Keartland, the naturalist on the Horn and Calvert expeditions.

While McEacharn typified the wealthy collector, who amassed material for its own sake (often by purchase), other individuals were building up private collections with a more scientific rationale. One factor in this was the adoption of trinomial scientific names by the British Ornithologists' Union in 1921. By formally recognising that species were variable, there was a surge of activity to determine geographical variation by describing and naming new subspecies. Individuals with sufficient funds and inclination were able to build up their own impressive collections and these, when ultimately deposited in a (usually) national museum, further improved the scope and research potential of the institution's collections. For example, in 1934 the F. W. Smalley collection was bequeathed to the Museum; it comprised 3,700 Palearctic skins collected mainly during 1890–1920. Just twenty years later the Museum acquired three of its most significant collections: in 1952 Hugh Whistler's collection of 2,000 British skins; in 1956 Joseph I. S. Whitaker's collection of c. 7,800 skins, mostly from countries around the Mediterranean and in 1956 Phillip A. Clancey's collection of c. 5,600 skins, mostly British and continental European.

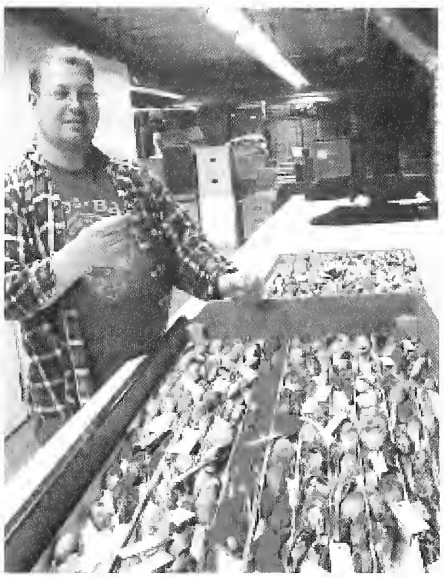
Most of Whitaker's collection had been made prior to 1900 but Whistler's and Clancey's collections were contemporary with their fieldworking activity which focused on taxonomic studies in Britain, continuing, in Clancey's case, up to 1950 when he emigrated to South Africa.

4) By the 1950s the era of unrestricted collecting had effectively drawn to a close. Not only did the Protection of Birds Act (1954) limit such activity, but the surge in taxonomic 'splitting' was at an ebb, and the vogue for substantial private skin collections waned. Thereafter, a few notable collections were deposited, for example those of Baxter and Rintoul (c. 1,200 skins in 1965) and Sir Arthur Duncan (c. 2,000 skins in 1970), but little else in later years was the product of active collecting. In consequence, over the last half century, the bird collections have largely grown through passive collecting (e.g. road kills, window-strikes, oil-spill casualties, etc.).



Crossbills from North Sea Bird Club NMS

In 1985 the National Heritage (Scotland) Act vested the collections of the Royal Scottish Museum in the National Museums of Scotland (which remains its formal name despite recent rebranding as National Museums Scotland). Specimen registration numbers are now (and retrospectively) cited with the institutional prefix combined with a prefix to indicate that they are held within the zoology collections: e.g. NMSZ.1906.123.7.



Stuart Rivers viewing American warblers Harry Scott

Collection content and use

Skins: Today the collection comprises nearly 62,000 skins of worldwide origin, though its strengths lie in material from the Western Palearctic, particularly Britain. Important material e.g. type specimens, extinct species, Scottish or British 'first records', etc., is stored separately from the main collection. Many species are represented by series of skins from different localities and collected at different times of year to show age and sex differences in plumage; smaller passerine species may be represented by hundreds of skins, but space constraints limit the holdings of large samples of bigger species. Crucial to a specimen's scientific value is its associated information, usually on its label. Essential data are date and locality of collection, sex and collector, though many older specimens (19th century) often have poorer data. Systematic collectors also recorded details of gonad development (reproductive status), skull ossification (ageing) and fat deposition (overall body condition). For skins prepared today, a note is usually made of fresh weight of the bird, stomach contents and cause of death. These additional pieces of information enhance the value of modern specimens and this is one reason the Museum continues to add to its collections. The maintenance of 'time series' is very important as geographical variation in populations can be studied both temporally and spatially. Such series have also allowed the detection (through tissue sampling) of toxic substances in the environment over the last 150 years or so. In the last few years

analysis of stable isotopes in feathers has been developed as a technique to acquire information on the geographical origins and diets of birds. These are new uses of collections: previously most taxonomic work was descriptive – with plumage characteristics and biometrics being the main ways of differentiating taxa. Similarly, future researchers may wish to utilise reference collections in ways unimaginable to us today. The Museum's collections therefore provide a resource both for current and future research.

Other research use on skins includes: reference material for artwork for scientific publications, moult studies, demographic and distributional analysis of historical populations, host-parasite relationships, criteria for ageing and sexing, origins of wintering populations from analysis of biometrics, and taxonomic studies through DNA sampling. The scope of the collection is reflected in published work and this output is by no means limited to the British avifauna; in 2001, 100 years after W. E. Clarke described the Negros Bleeding-heart, a German ornithologist requested images of the type specimens of *Gallicolumba keayi* held at NMS to compare against a description of a Bleeding-heart found in 1996 on the island of Panay. Although the Panay bird proved to be the same species, this demonstrates that 'historical material' can have high contemporary relevance.

Birds' eggs: The Museum's egg collection developed in a similar way to the skin collection, although as egg collecting was a widespread hobby for a prolonged period, a plethora of minor collections have ended up in museums. The scientific value of these small collections tends to be low, because of poor quality or lost data. However, a few well-documented collections arrived in Edinburgh by the start of the 20th century - for example 430 European clutches from H. W. Feilden and J. A. Harvie-Brown in 1898 and 630 North American eggs from H. E. Dresser in 1899.

...unning Stephen Kane

Eggs from this washed-out Black-throated Diver nest were passed under licence to the Museum *Ian Francis*

The main collecting period in Britain spanned the 1920s to 1940s and it is the material from this era from serious collectors that provides the scientific integrity of the collection. Comprehensive clutch data generally includes date, locality, collector's name, number of eggs in clutch, incubation state and particulars of nest site. Long series of clutches were often accumulated to demonstrate variation in appearance, size and weight, but full and accurate data were fundamental to a collection's merit. As with skins, research on eggs developed in ways that early collectors would not have foreseen. Perhaps the most celebrated example is the link between pesticides and egg-shell thinning demonstrated by measurements made from Peregrine Falcon eggs in collections. Distributional data for historical breeding ranges of species have been obtained from clutch cards, for example White-tailed Eagle and Spanish Imperial Eagle. 'Time series' can facilitate phenological studies through analysis of laying dates.

Egg collecting peaked around the 1940s until more restrictive legislation led many activists to gradually lose interest. Many significant private collections were donated to the Museum from the 1970s onwards. In Edinburgh, prime amongst these was the collection of 1,600 clutches from European species formed by Captain J. H. McNeile and accompanied by detailed data cards and his typed diaries, lavishly illustrated by photographs. Other high-quality collections came from Dr H. M. S. Blair (1,000 clutches in 1981), Dr W. Serle (4,800 clutches in 1987) and P. R. K. Davis (600 clutches in 2004). Other sources of eggs from rarer species, though more *ad hoc* in nature, include staff of RSPB and SNH; this material crucially helps to maintain 'time series' for future research. The collection currently consists of some 32,000 clutches with a strong bias towards the Western Palearctic.

Skeletons: There are about 5,500 'preparations' though these range from only one or two bones to complete skeletons. Much of the collection prior to the 1930s was incomplete skeletons usually with poor data, reflecting their former use as teaching aids rather than as primary research material. However the range and number of bones for particular species is useful for identification and this collection has generally been used mostly by archaeologists. From 1980 the Museum has processed hundreds of oil-spill casualties as complete aged and sexed skeletons, significantly increasing the collection's depth for a number of sea-bird species. Series such as this are useful for studying pathology as well as determining osteological measurements for sexing and ageing individuals.

Minor collections include about 400 nests, mainly British, and several hundred specimens preserved in spirit which are generally older, anatomical preparations.

Archives: The bird section holds collectors' field notebooks and other archive material. The NMS Library holds the Harvie-Brown manuscripts which were a major source of previously unpublished information for *The Birds of Scotland* (2007).

Collection access and donations

We encourage use of the collection compatible with its maintenance as a longterm resource for research. Although previously housed at Chambers Street, the redevelopment of this city-centre location primarily for display functions has resulted in the relocation of the research collections to the National Museums Collection Centre (NMCC), 242 West Granton Road, Edinburgh, EH5 1JA. With limited staff resources, bona fide researchers are requested to make an appointment for access to the collections. For further information, or if you have specimens you would like to donate to the NMS, please contact Bob McGowan (0131-247 4262; b.mcgowan @nms.ac.uk) or Andrew Kitchener (0131-247 4240; a.kitchener@nms.ac.uk).

Bob McGowan, Senior Curator, Birds, National Museums Scotland

NOTES & COMMENT

Hebridean Song Thrush

I was prompted to write this note after seeing a photograph posted on the SOC web-site gallery entitled 'Hebridean Song Thrush' which was taken on South Uist in October 2008 (see Photo 1 below).

During a series of trips to Barra, Outer Hebrides in recent autumns, I have had the opportunity to observe numerous Song Thrushes there, with several of these examined in the hand during ringing sessions with Mark Oksien. We have encountered not only individuals of the subspecies *hebridensis* (the form classically described as breeding on the Outer Hebrides and Skye), but also birds showing characteristics more consistent with the subspecies *clarkei* (the form which breeds throughout the whole of Britain except for the area where *hebridensis* breeds) and a good number which more closely resemble the paler nominate subspecies *philomelos* (breeds across continental Europe eastwards into central Siberia) and also birds showing features intermediate between these forms (plumage colouration is clinal across the species range with the darkest birds being those in the northwest ie. *hebridensis*).

Song Thrush, S. Uist *Angus Hogg*

I feel that the bird shown in the SOC gallery (above) is not actually an individual of the subspecies *hebridensis*, but that the whitish ground colour of the flanks, lack of strong dark head markings, particularly in the ear coverts, and its relatively pale upperparts indicate that it is either an individual towards the paler end of the plumage range shown by the subspecies *clarkei* or more likely an overshooting migrant *philomelos*.

Identification of individual Song Thrushes to subspecies level from single photographs is not easy, and the situation is certainly not helped by the relative lack of good colour photographs of definite *hebridensis* birds in the literature. Even the photograph accompanying the Hebridean Song Thrush account in the latest *'Birds of Scotland'* (Forrester & Andrews 2007, p1151-2) shows a bird which does not appear to me to be a

Hebridean Song Thrush, Barra *Stuart Rivers*

clear-cut *hebridensis*. While this individual has greyish-brown rather than buffish flanks, and only a small amount of pale buff ground colour to the throat, the back of the bird appears somewhat pale and the markings on the head do not seem notably heavy or dark/blackish, and in particularly the ear coverts have a pale centre rather than being more uniformly dark. The individual on p1151 shows plumage features associated with 'classic' examples of both *hebridensis* and *clarkei*, and thus better fits the intermediate characteristics more typical of birds found in the Inner Hebrides and the adjacent areas of western Scotland.

The original description of the *hebridensis* subspecies of Song Thrush was made by William Eagle Clarke and included a B&W plate of the male type-specimen which was one of a pair obtained on Barra 24th April 1912 (Clarke 1913). The male and female type-specimens are still held in the National Museum of Scotland collection and these plus Clarke's plumage description are the standard to be matched for allocation of a Song Thrush to this subsprcies. For 90 years this remained the most detailed description of this form: "... is decidedly darker in its plumage than any of the British or Continental representatives of this species. The mantle and wings are dark (clove) brown, the head slightly redder, and the rump and the upper tail-coverts dark olive... The most striking feature of the under surface, and indeed of the plumage generally, is the multitude of intense, black ovate spots on the throat, chest and abdomen; while the buff, which is confined to the throat and chest is very pale as compared with Song Thrushes from other areas. The flanks are pronouncedly streaked with greyish-brown, and show little of the buff which is much in evidence on the flanks and breast of other Song Thrushes. The buff of the under wing-coverts is richer (redder) than in other specimens with which I have compared them".

Disappointingly, none of the major reference works dealing with Palearctic

Hebridean Song Thrush, Barra *Stuart Rivers*

passerines at subspecies level published since then have provided any more information on the key features separating the three European subspecies (eg.Vaurie 1959, Svensson 1992), though both BWP and the Helm Identification Guide *'Thrushes'* describe *hebridensis* as "darker earth-brown above than *clarkei*, except for greyish rump and upper tail-coverts" (Cramp 1988, Clement & Hathway 2000).

By far the best source of information about the identification of the *hebridensis* subspecies of Song Thrush is the paper "Scotland's endemic subspecies" (McGowan *et al.* 2003) which also includes illustrations of the three European subspecies. The research for this paper established that a number of Song Thrush specimens from the Outer Hebrides collected since 1913 and now in the National Museum of Scotland collection had been wrongly ascribed as *hebridensis* and were actually one of the other forms or intermediates (R.Y. McGowan *pers comm.*). Importantly, this paper not only included details of the original Clarke description, but also contained a section listing six features useful in differentiating *hebridensis* from *clarkei* and *philomelos*: the underparts have bold, almost black spots; the ground colour of the flanks is smoky, greyish-brown rather than buffish; the underwing coverts are a richer, darker (more rufous) buff than in the other races; the mantle and especially the forehead and crown are darker brown with a less rufous, less warm tone; the rump and uppertail coverts have a greyish wash; the dark markings of the face and throat are generally bolder.

Photos 2–5 show two individuals trapped and ringed on Barra which exhibit the plumage features of *hebridensis*: the bird in photos 2 and 3 was photographed in October 2004 and is a fairly typical individual, while that in photos 4 and 5 which was photographed in September 2002, shows just how dark some individuals of this form can be.

Hebridean Song Thrush, Barra *Stuart Rivers*

With the two other European subspecies both occurring on the Outer Hebrides at various times of the year the certain identification of individuals as *hebridensis* will require elimination of these forms, and with the likelihood of intermediate individuals also being present it may not be possible to ascribe every individual unequivocally to one of these three forms at all. The extent of the breeding range of *hebridensis* remains uncertain nearly 100 years after it was officially described, and that this is the form breeding on Skye has recently been questioned (McMillan 2005). Similarly the areas where *clarkei* x *hebridensis* intergrades occur during the breeding season is also not fully known, and virtually nothing is known about how far any of these birds migrate/disperse for the winter. We hope to focus more on the ratios of the different forms encountered during further visits to the Outer Hebrides, but there is obviously far more still to be established regarding the distribution of the different forms on the Inner Hebrides and the west coast of Scotland during the different times of the year.

Stuart L. Rivers, Flat 8 (2F2), 10 Waverley Park, Edinburgh, EH8 8EU. E-mail: slr.bee-eater@blueyonder.co.uk

References

Clarke, W.E. 1913. The Song Thrush of the Outer Hebrides – *Turdus musicus hebridensis* – a new racial form. *Scottish Naturalist* 1913: 53-55.

Clement, P. & Hathway, R. 2000. *Thrushes*. Christopher Helm, London.

Cramp. S. 1988. *Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic*. Volume 5. Oxford University Press, Oxford.

McGowan, R.Y., Clugston, D.L. & Forrester, R.W. on behalf of the Scottish Birds Records Committee. 2003. Scotland's Endemic subspecies. *Scottish Birds* 24: 18-35.

McMillan, R.L. 2005. *Skye Birds*. skye-birds.com, Elgol.

Svensson, L. 1992 (4th Edn). *Identification Guide European Passerines*. BTO, Thetford.

C. 1959. *The Birds of the Palearctic Passeriformes*. Witherby, London.

The Ringing of Waxwing NW25766

A phone call from Jimmy Maxwell is often a good start to the afternoon! Invariably Jimmy has good bird news for me and Saturday 29th November was no exception. Jimmy and Lang Stewart had a Waxwing - it had flown into a building in Hamilton and was uninjured; they wondered if I wanted to ring the bird before it was released. I was just leaving the house for a family afternoon Christmas shopping but needed little excuse to postpone, and raced over to Hamilton. The Waxwing was indeed in good condition and was still eating berries when I arrived. The bird was an adult female. Aged on the presence of yellow on the primary tips as well as edges, and as a female on the relatively narrow band of yellow on the tail and the diffuse edge to the black throat patch where it meets the upper chest.

She was ringed with ring NW25766 and we took a note of her body weight 62.5g which is a good weight and wing length of 115mm. This wing length was of interest, not because it was unusual for this species, but because it was the same as that of the last two species I had ringed. These were a Jack Snipe and a Redwing, a coincidence yes, but all three of these birds could have flown a similar distance, potentially originating from the same area in N.W. Europe.

The wing-measure *Lang Stewart*

The Waxwing was held briefly for photographs and released, flying up into a tree a short distance away. This bird was one of only three Waxwings ringed in the Clyde area this winter.

Iain Livingstone

Isle of May comment

I was especially interested in Mike Martin's report in SBN 90. I am an archaeologist with a special interest in the relationship between people and birds in the past, so was very pleased to see that bird remains have been recovered during excavations on the Island of May. It was very exciting to see that bones of the Great Auk were found, especially as some of them seem to be quite recent.

We know that the Great Auk was occasionally seen around Scotland until the 19th century, but its excavated remains tell a more nuanced story. Bone remains are not at all uncommon until about the 11th century CE, but from that time onwards they are found only very rarely. The latest one I know of is from a 16th century midden on the Isle of Man. If the bones from the Isle of May are later than the 16th century, they will be the youngest known from an excavated site in the British Isles, so would be very exciting. (See: Serjeantson, D., 2001. The Great Auk and the Gannet: a prehistoric perspective on the extinction of the great auk. *International Journal of Osteoarchaeology. Special issue*, 11, 43-55.) I look forward to an update if Glasgow University Archaeological Research Department decide to refine the dating of the bones from the Isle of May.

Dale Serjeantson, Archaeology, School of Humanities, University of Southampton.

Barra still maintaining high interest rate

I read with interest the recent article by Stephen Duffield (The Outer Limits – birding the Western Isles in autumn, SBN 89) and it was good of him to mention the autumn trips which our "intrepid band" has made to Barra when highlighting the relative lack of attention the Outer Hebrides has received from visiting birders in the autumn. I certainly agree with his assessment that it has been "tough at times but the rewards have been amazing", but feel that his statement... "with a couple of quiet years the excitement has waned and the high expectation has resulted in a subsequent lull in enthusiasm" could be taken to suggest that there has been a downturn in our interest and efforts. This is definitely not the case; in fact the opposite is true.

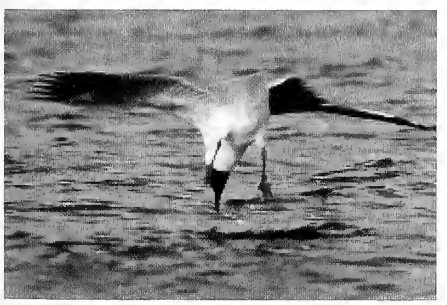
While the relative success of our first visit in 2002 got the ball rolling it was undoubtedly the number of rarities found during our 2003 trip that really alerted most birders to the potential of Barra. Consequently other birders also made trips to the island in the two following years, including 'crews' from England and the Hebrides. Interest by 'additional teams' dropped off in 2006 and 2007, presumably as it became apparent that not every year was guaranteed to be a rarity bonanza and in reality a high level of thorough searching was required on a daily basis in order to find any unusual birds passing through. Even so, we were joined by another Scottish 'crew' for a few days in October this year (2008). For our own part we managed to increase our time on the island to three weeks in 2006, and members of our team were on Barra for four weeks this year and aim to again cover four weeks in 2009.

I believe one of the main reasons that our enthusiasm for spending time in autumn on Barra has not waned is that we are not purely focused on finding rarities, though we are pleased to be maintaining an average of just over two BBRC description species found per trip. We make a point of recording all species seen each year in great detail, and Mark Oksien has compiled annual 1km grid square maps for each of the 161 species we have encountered in our seven trips to date. It is our intention to publish the results once we have a few more trips under our belt, and our commitment to returning to Barra will extend far beyond then. Our interest in the island means that some of the team have even made trips at other times of the year with a view to getting a better idea about the breeding and wintering populations of birds present. However, make no mistake we are as excited by seeing, and particularly finding, rarities as anyone else and this still provides a major impetus to our visits, and I am sure that Barra will continue to supply some fitting rewards in the future.

Stuart Rivers (and the 'Barra Lads')

Caption Competition

Provide a caption for the bird picture below and have a chance of winning an SOC item. Each *SBN* edition will feature a new photo. The winner and other best captions will be shown in *SBN* 92. Send your single caption by E-mail to jimmy.maxwell @virgin.net (or of course by mail to the SOC – see Page 3).



Black-headed Gull *Eric McCabe*

The winning Caption from *SBN* 90 (see photo below) came from Jennifer Spring Smyth with "Am I bovvered?" Well done. Other runners-up were - "Let sleeping gulls lie" by Nick Carter and "It's behind you!" by Fay Pascoe.

Black-headed Gull and 'Owl' *Jimmy Maxwell*

Thoughts on Hooded and Carrion Crows

From an Arabic fable – crows catching an owl

In Britain, the Crow is the classic symbol of evil, and a portent of misfortune. In Celtic folklore, crows are associated with terrible goddess-hags. One such hag told James I when he was riding in Perth in 1437 of his impending assassination. When asked how she knew, she replied that Huthart had informed her. Huthart was a Hooded Crow, hence the modern name Hooded or Hoodie.

Isabel Gowdie, now the focus of James Macmillan's Symphony #3, was a young housewife in Auldearn, Nairnshire. At her trial in 1662, she confessed to being a witch, and duly hanged. She freely admitted that crows were the favoured way for witches to travel at night.

'I shall go into a crow
With sorrow and sighing, and mickle care
And I shall go in the Devil's name,
Aye, till I come home again.'

The counting of crows as they flew overhead was once common in Scotland, as a means of foretelling the future.

'One for sorrow,
Two for mirth,
Three for a wedding,
Four for a birth,
Five for silver,
Six for gold,
Seven for a secret, not to be told,
Eight for Heaven,
Nine for Hell,
And Ten for the Devil's own selfl]'.

Finally I shall quote again, one of the older medieval Border ballads, which recalls the habit of crows, and even more so, Ravens always being in attendance at battlefields waiting to devour a slain knight.

THE TWA CORBIES

As I was walking all alane,
I heard twa corbies making a mane:
The tane unto the tither did say,
'What shall we gang and dine the day?'.

'In behint yon auld fail dyke
I wot there lies a new-slain knight;
And naebody kens he lies there
But his hawk, and his hound, and his lady fair.

'His hound is to the hunting gane,
His hawk to fetch the wild-fowl hame,
His lady's t'en anither mate,
So we may mak' our dinner sweet.

'Ye'll sit on his white hause-bane,
And I'll pike out his bonny blue e'en
With a lock o' his golden hair
We'll theek our nest when it grows bare.

'Mony a one for him maks mane,
But nane sall ken whar he is gane:
O'er his white banes, when they are bare,
The wind shall blaw for evermair'

Should you be interested, I have contributed much of the section on the Corvidae in *The Birds of Argyll*. [Argyll Bird Club, 2007].

Michael Thomas

Fish-Hawk

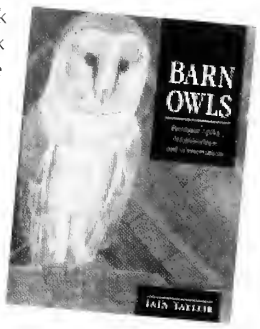
Peter Holt (SBN90:21) asks about Fish-Hawk. I corresponded with him about seabirds in the 1960s, when I met him at a BTO Conference. He was a charming tall, gaunt old gentleman. According to the Earl of Radnor in the introduction to "Fish-Hawk"'s book "Studies of British Birds" (Duckworth, 1937, who also published "Birds through the Year" in 1938), he was a very able solitary sportsman with a preference for the Dornoch area, who took to drawing and writing about birds as well as shooting them; he also illustrated James Fisher's "Bird Recognition" and Wentworth Day's "Sporting Adventure". He told me his career had been spoilt by World War 1, and that afterwards he provided medical assistance to the then vast North Sea fishing fleet, where his most original contribution was to record the birds seen in "British Birds" in the 1930s, a precursor to the North Sea Bird Club - he also made a remarkable observation of the accumulation of algae. I persuaded him to deposit his records in the Alexander Library at Oxford.

Bill Bourne

This thread will continue further in SBN 92 when we hope to print a full article on Fish Hawk (real name David K. Wolfe Murray). It will be written by his son Michael who lives in Aberdeenshire, hopefully with illustrations of his father's work. Ed.

BOOK REVIEWS

Barn Owls - predator-prey relationships and conservation. Iain Taylor. 1994 and 2003. Cambridge University Press ISBN 0-521-54587-0 (paperback) £31.00.



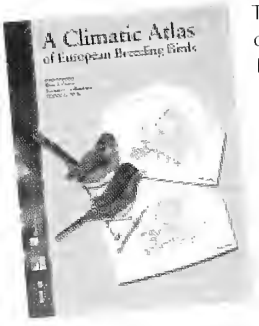
This is the paperback edition of Taylor's book published in 1994. The author was at the University of Edinburgh and much of his fieldwork was done in Scotland, particularly in Eskdalemuir, and in the Dee catchment area. Keith Brockie provided the illustrations.

Barn Owls are not a neglected species! I have in my book collection a very nice volume by Colin Shawyer published by Arlequin Press in 1998. Taylor's book is for the seriously dedicated, for it is a work of scholarship - the Esk area was studied for 14 years. It is a 330 page book with the references taking up 18 pages.

If you are into Barn Owls and if you are concerned for their future survival, this book is essential reading.

Michael Thomas

A Climatic Atlas Of European Breeding Birds. Brian Huntley, Rhys E. Green, Yvonne. C. Collingham and Stephen G. Willis. Lynx Edicions, Barcelona, 2007. ISBN 978-84-96553-14-9. 528 pages; 431 species mapped in colour. Hardback, £40.00.



This very topical book, a collaboration between Durham University, RSPB and Lynx Edicions, illustrates an innovative prediction of the future range of Europe's breeding birds at the end of this century.

The distribution of breeding species gathered for the EBCC (European) Atlas in the 1980s was matched to climate data for a similar period. Temperature and moisture variables were firstly mapped on the same grid as the bird distribution. These two datasets and global climate prediction models were then used to predict range changes. The bioclimatic variables chosen were those believed to be most likely to influence the natural environment, and the results represent the magnitude and direction of range adjustments should species fully track the climate changes.

Introductory chapters analyse the current patterns of bird distribution, land-cover and climate as well as the methodology and the variables used. The third chapter represents the bulk of the book, in which 431 species are scribed fully, each account explaining the l shown by three maps of which the final strates the situation in the period 2070-2099. Another 48 scarce species and 16 introduced species are briefly examined. The final chapters review and discuss the conclusions.

For the average birder, the interest lies in the range maps. The changes show that many northern species will withdraw north and east, some becoming extinct in Britain. Conversely, many western Mediterranean species should edge tantalisingly north to colonise southern England although the current Atlas distribution of Little Egret is already beyond that predicted for the end of the century. The apparent suitability of southern Britain to the Short-toed Eagle highlights one of the limitations of the study's results, that of food supply, which will not always be able to follow the birds. Similarly, some montane species are mapped in lowland regions. A few restricted European species may become extinct, such as Dupont's Lark, while Iberia's climate will suit eastern specialities such as Olive-tree and Ruppell's Warblers, Sombre Tit and Masked Shrike. The focus of species richness in eastern Europe shifts northwards so Finland will be the place to go in future. However, while Britain retains over 75% of its breeding species, only 50% remain in Iberia, although species likely to colonise Europe from North Africa are not considered.

Overall, adaptable generalist species that occupy a wide range of habitats will cope far better than the specialists, particularly the resident species and those with fragmented habitats. For some, displacement is significant and may even be unattainable. Adjustments to migration routes are also probable. Since the abundance of many species is likely to be reduced, BirdAtlas 2007-11 should provide yet another benchmark to measure this in Britain and Ireland.

Despite its limitations, this book is a timely reminder of the fragility of some of Europe's breeding populations. It will allow conservation scientists, governments and NGOs to attempt some mitigation of the less favourable aspects shown here but they will need to respond to the dynamic nature of the predicted range changes, in which small and isolated reserves will not suffice. In view of the current rate of climate change, it is difficult to be optimistic about the problems that this book highlights. However, who knows what vagrants will turn up in the meanwhile!

Norman Elkins

Frontiers in Birding. Martyn Garner and friends. 2008. Bird guides Ltd. ISBN 978-1-898110-47-7 Paperback £19.95.

If you did not receive this book for Christmas, then order one for yourself now.

Martin Garner has enrolled many of the luminaries of British bird watching to cover a wide range of topics - Ian Wallace on note taking, Andy Stoddart on discovering bird movement, Keith Clarkson on discovering visible migration and Rob Hume on discovering gulls. There is also a long section on the more difficult to differentiate species such as four kinds of White-fronted Geese, Common and Black Scoter, ring-tailed harriers and many more. All are well informed and fully referenced.

I liked this book, in part for the variety of contributions, in part because of the enthusiasm of the contributors. Ian Lewington has done many of the illustrations, including the Hen Harrier that graces the cover.

Michael Thomas

Adventures Among Birds, F.J.Waydelin. 2008, privately printed in Leeds by James Whitaker. Peregrine Books (0113 258 5495) Limited to 100 copies. Hardback. Price £48.00 plus £4 p&p.

This interesting diary, previously unpublished, is about the exploits of a bird-nesting schoolboy, Frederick Waydelin in the Croydon area in the later years of the 19th century. As he gets older and gains experience, he undertakes expeditions with his friends, to Hungary, Ireland and three times to Shetland. It is these visits to the northern isles that from a historical point of view are the most valuable.

On a day visit to Foula on June 8th 1898, Waydelin describes in detail how he and his two friends employed deception to outwit the island warden , take three clutches of the then rare Great Skua or Bonxie and then to successfully get them off the island. Nine days later, the group were on North Roe and came across an occupied eyrie of the White-tailed Eagle. An epic rope descent ensued and the greatly prized egg taken. It proved to be cracked and addled, which probably explains why it was available so late in the season.

There is much more to this book than simple egging adventures, for example chapters on gamekeepers, sea cliff climbing on Rathlin Island, Hampshire and the social scene prevalent at the time. After his third visit to Shetland it appears that Waydelin gave up egg collecting but remained an observant birdwatcher for the rest of his comfortable life.

David Clugston

Handbook of the Birds of the World Volume 13: Penduline Tits to Shrikes. Edited by Josep del Hoyo, Andrew Elliott & David Christie, 2008. Lynx Edicions, Barcelona. ISBN 978-84-96553-45-3. 880 pages £150.00.

Having previously purchased the first twelve volumes in this wonderful series, I was full of expectation when volume 13 arrived. I was not disappointed. In my opinion, HBW, as it is affectionately known, is the greatest birdbook ever written. With only three more volumes remaining it will be a magnificent collection, which will describe and illustrate every species of bird. If I was permitted to own only one book or set of books this would be it. Reviewers have heaped praise on each of the twelve volumes previously published and I am sure volume 13 will be no exception.

This volume contains accounts for the 595 species - Penduline Tits, Long-tailed Tits, Nuthatches, Wallcreeper, Treecreepers, Rhabdornis, Sunbirds, Berrypeckers and Longbills, Painted Berrypeckers, Flowerpeckers, Pardalotes, White-eyes, Sugarbirds, Honeyeaters, Orioles and Shrikes.

For each family there is a very readable introduction, which, for instance in the case of the Shrikes runs to 42 pages. All of the family introductions are lavishly illustrated with wonderful photographs. There are 48 photographs of shrikes. The individual species accounts are authoritatively written, covering such aspects as taxonomy, distribution, description, breeding, status and much more, including a clear and accurate range map. All species are fully illustrated by well-known artists, who, in this volume, include Norman Arlott, Ian Lewington and Hilary Burn. As an example, the four colour plates for the 31 species of shrike contain 78 images painted by Tim Worfolk.

It is customary for each volume to include a foreword covering an important aspect of ornithology, written by a guest author. In volume 13, it is 'Bird Migration' - a thoroughly enthralling 33-page essay by Ian Newton.

When the first volume appeared in 1992, there were many sceptics who believed the series would never be completed. Sixteen years and twelve volumes later, this vast undertaking is within sight of the end. The last three volumes are likely to appear at intervals little more than twelve months apart. As a reference work it is unsurpassable. As a book to simply browse through it is unbeatable. If you are at all interested in world birding and are not already collecting this set you certainly should be. Without delay see your bank manager to arrange the necessary finance to purchase the first thirteen volumes at the special price of 'only' £1,547 (full price when volumes bought individually £1,950), or get details of a monthly instalment plan from the HBW website www.hbw.com.

Ron Forrester

Bird Watching in the Philippines, Volume 1, Carlos M. Libosada, 2008, Philippines Department of Tourism, paperback, Free.*

For anyone thinking of a bird watching trip to the Philippines this would be a useful introduction. The key birding sites are covered, with information on how to get there, best times, local guides, fees involved, availability of accommodation, and birds recorded on each site. There are glossy pictures of some birds, but this is *not* a field guide.

There is a section entitled Fast facts on the Philippines covering various regulations, climate, business hours and general facilities.

Information on various local tour operators is given with details of 5, 6, and 10-day tours. This book includes a list of the bird species seen in the Philippines and a section listing hotels of various grades in Manila, Palawan, Cebu and other locations.

The Philippines Department of Tourism is actively promoting bird watching on the islands and intends to issue further volumes.

Joan Wilcox

**limited number of complimentary copies of volume 1 available on request: Text: WOW <space> full name, address, e-mail, to 81404 Delivery time 2-3 weeks*

Speciation in Birds, Trevor Price, 2008. Roberts and Company, Colorado. ISBN: 0-9747077-8-3. Paperback. Price $59.95 (see www.nhbs.co.uk or other major retailer for a sterling price).

If you are interested in the mechanisms of how different species are evolving and why they are classified as they are, this is the book for you. But for everyone else, this is a serious scientific read and not to be embarked upon lightly!

Whatever your background though, you will find this to be a well written book with useful, brief summaries at the end of each chapter. It is comprehensive and up to date with modern theories, bringing all relevant ideas together in one place. Topics include "what is a bird species", ecological divergence with or without geographical separation, parapatric speciation and the fitness of immigrants, island endemism, social selection and the evolution of song, divergence in response to increased sexual selection, mate choice at the end of speciation, hybrid zones and genetic incompatibility. If some of these terms do not mean much to you, there is a seven page glossary. Reading this book will answer all your questions on this vast but interesting topic.

This is an American book and many examples are from the New World, but the separation of Pied and Collared Flycatchers is one European example. Those of you who have been to Eastern Europe may have seen brown male Pied Flycatchers singing, and apparently the occurrence of these brown males is positively correlated with the presence of Collared Flycatchers in preferred deciduous woodland habitats. Experiments show that the two species compete for territories and male Collared Flycatchers are more aggressive towards darker (black and white) Pied Flycatchers.

If speciation in birds interests you I recommend that you browse the copy in the SOC library. You may find yourself absorbed!

Mark Holling

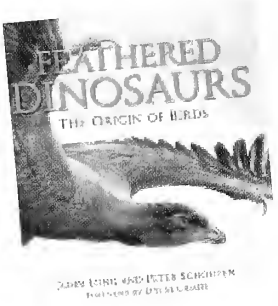
Birds and Windfarms Risk Assessment and Mitigation. Editors Manuela de Lucas, Guyonne F.E. Janns and Miguel Ferrer 2007 Quercus , ISBN: 978-84-87610-18-9 Hardback, 275 pages, £21.00.

This book is a compilation of fifteen scientific papers by knowledgeable authors from several countries who present different aspects of the impact of windfarms on the environment. With windfarms becoming more ubiquitous, and many planning applications arising, this is a useful resource. The book presents an overview of the various technologies and their potential effects on birds and bats, methods of minimising the risk of adverse impacts, and gaps in knowledge and how to tackle them. Most of the papers cover European, Scandinavian and American studies. Several are British. We are pleased to have recently purchased this book for the SOC reference library.

Jean Torrance

Feathered Dinosaurs, the Origins of Birds, John Long, Illustrator Peter Schouten, 2008. OUP ISBN 978-0-19-537266-3, Hard Back £20.00.

This book traces the evolution of birds from dinosaurs during the Cretaceous period. Fossil bones found in mid-19th century were recognised by Sir Richard Owen as a distinct reptilian class that walked upright on hind legs and was later named Dynosauria (terrible Lizard). As understanding and techniques have developed into the 21st Century, Palaeontology has become a multidisciplinary science using many new techniques including computer cladistic analysis and CT scanning. These methods have been employed in studying a significantly large fossil deposit found within the last decade in Liaoning Province North East China which contained many individuals of at least 70 species. Scientists studying these deposits have been able to demonstrate a suite of anatomical and physiological characters found only in some theropod dinosaurs and in birds, thus demonstrating the evolution from running dinosaurs to flying birds.



John Long has written 9 short informative sections covering the various groups illustrated in this book and also an explanation with each illustration.

It is the artwork that is most impressive. Peter Schouten first worked in palaeontological reconstruction then became a wildlife artist. He has combined these skills to bring the [illegible] and their habitats to life. He has based [illegible] on detailed research of the fossil record and the study of the behaviour, morphology and colouring of birds which evolved from the

theropod dinosaurs. He drew 'inspiration from the features of existing creatures –skin colouring– eye size etc.' basing his decisions on the realities of 'the need to eat, the need to avoid being eaten and the desire to procreate.'

Each illustration is accompanied by scientific details of Infraorder, Superfamily, Family, Age and Locality of find.

This is a fascinating and inspiring book bringing these animals out of dusty Museums into their real habitat, but in one aspect it appears to be by a Palaeontologist for other Palaeontologists. I had a real problem with 'age', The information that the period dealt with was 65 million years ago is buried deep in the text but there is no diagram to put the Cretaceous Period in context. Those (like me) reading this book with little grounding in Geology or Palaeontology would be greatly helped by a simple diagram outlining the relevant Era: Mesozoic and the subdivisions into Triassic, Jurassic and Cretaceous. I found such a diagram and the necessary information from the 2008 Encyclopaedia Britannica via the web and also discovered that the Cretaceous Period was relatively warm and wet. But not every one has access to the web or the time to go there.

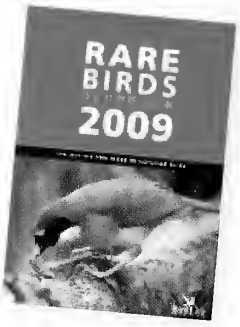
Harriet Trevelyan

Flight of the Wild Geese. Graham Uney, 2008. Whittles Publishing, Dunbeath, Caithness 116 pages. Paperback ISBN 978-1904445-54-8, £14.99.

The title of this book suggests that this is a narrative rather than a definitive study of geese. This is the case. The author reveals, in a very readable form, his early developing interest in birds generally, culminating in a desire to trace and visit both the wintering and breeding areas of the geese that spend part of their lives in Scotland. His travels make fascinating reading, rich in observation of all wildlife from the Solway Firth to Svalbard. An enjoyable and illuminating read evoking a real sense of adventure.

Keith Macgregor

Rare Birds Yearbook 2009 Erik Hirschfeld (Editor) 2008. MagDig Media Ltd ISBN 978-0-9552607-5-9. Softback 274pp £18.95 (of which £4.00 goes to conservation).



This is the second edition of what promises to be an annual publication, covering the Critically Endangered bird species of the world. Since the 2008 edition, several species have moved from Endangered to Critically Endangered and *vice versa* but the total of 190 Critically Endangered species is one more than last year. Most of the 190 are fully covered, with an article ranging from half a page to several pages and are illustrated by photographs and distribution maps and a description of the threats to survival. To avoid repetition, some 60 species are simply listed, with reference back to the relevant page of last year's edition, since nothing new has emerged in the year. There is also a "ones to watch" section, covering species in the Endangered category at risk of being upgraded to Critically Endangered.

There are also a number of interesting introductory chapters on species brought back from the brink of extinction (California Condor, Marquesan Imperial-pigeon) and such diverse topics as "Birdfair and Conserving Rare Birds" and "Religion, Tradition and Bird Conservation".

A fascinating book and well worthwhile, as £4.00 of the price goes direct to BirdLife International to help fund species conservation.

Paul Speak

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01490 6887

George Waterston Library - Vacancy

A half- or part-day position for a librarian at SOC HQ will be available from 1st July 2009. Details regarding hours and rate of pay are still to be finalized but the Club would like to hear from anyone who feels they may be interested.

Ideally, applicants should have some knowledge of ornithology and good computer skills. ***To register your interest, please contact Wendy on 01875 871330 or email: mail@the-soc.org.uk***

ISBN 0268-3199

Scottish Bird News

Scottish Bird News is the magazine of the SOC. It acts as a channel of communication for SOC members and disseminates information relevant to Scotland's birdlife. It is published four times a year in March, June, September and December. Articles and notices are welcomed and should be sent to the Editors at the address below no later than five weeks before publication. The views expressed are not necessarily the policy of the SOC. Contributors should note that material has to be edited, often at short notice, and it is not practical to let authors see these changes in advance of publication.

The Scottish Ornithologists' Club,
Waterston House, Aberlady,
East Lothian EH32 0PY.
Tel: 01875 871330
Fax: 01875 871035
E-mail: mail@the-soc.org.uk

The Scottish Ornithologists' Club (SOC) was established by a group of Scottish ornithologists who met together in the rooms of the Royal Scottish Geographical Society in Edinburgh on 24th March 1936.

The Club now has 2200 members and 14 branches around Scotland. It plays a central role in Scottish birdwatching, bringing together amateur birdwatchers, keen birders and research ornithologists with the aims of documenting, studying and, not least, enjoying Scotland's varied birdlife. Above all, the SOC is a club, relying heavily on keen volunteers and the support of its membership.

Headquarters provide central publications and an annual conference, and houses the Waterston Library, the most comprehensive library of bird literature in Scotland. The network of branches, which meet in Aberdeen, Ayr, the Borders, Dumfries, Dundee, Edinburgh, Glasgow, Inverness, New Galloway, Orkney, St Andrews, Stirling, Stranraer and Thurso, organise field meetings, a winter programme of talks and social events.

The SOC also supports the Local Recorders' Network and the Scottish Birds Records Committee. The latter maintains the 'official' Scottish List on behalf of the Club. The Club supports research and survey work through its Research Grants.

The Club maintains a regularly-updated web site, which not only contains much information about the Club, but is also the key source of information about birds and birdwatching in Scotland. SOC is a registered Scottish charity (no SC 009859).

www.the-soc.org.uk

Passwords to access members' web pages on the SOC web site: 'Lesser' & 'Whitethroat'